# STATE OF NEW MEXICO

## STATEWIDE WATER QUALITY MANAGEMENT PLAN

## NEW MEXICO
## WATER QUALITY CONTROL COMMISSION

P.O. Box 26110
Santa Fe, New Mexico 87502

December 17, 2002

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**List of Acronyms and Abbreviations in this Plan**

| | |
|---|---|
| BPJ | Best Professional Judgment |
| BMP | Best Management Practice |
| CFR | Code of Federal Regulations |
| CPP | New Mexico Continuing Planning Process |
| CWA | Federal Clean Water Act (33 U.S.C. 1251 *et seq.*) |
| CWNS | Clean Water Needs Survey |
| CWSRF | New Mexico's Clean Water State Revolving Fund |
| DMA | Designated Management Agency |
| LA | Load Allocation |
| MOS | Margin of Safety |
| MOU | Memorandum of Understanding |
| NMAC | New Mexico Administrative Code |
| NMED | New Mexico Environment Department |
| NMOCD | New Mexico Oil Conservation Division |
| NMSA | New Mexico Statutes Annotated |
| NMWQA | New Mexico Water Quality Act (Chapter 74, Article 6 NMSA) |
| NPDES | National Pollutant Discharge Elimination System |
| NPS | Nonpoint Source(s) of Pollution |
| NPSMP | Nonpoint Source Management Program |
| POTWs | Publicly Owned Treatment Works |
| QAPP | Quality Assurance Project Plan |
| SRF | New Mexico's Clean Water State Revolving Fund |
| SWQB | Surface Water Quality Bureau of the NMED |
| TMDL | Total Maximum Daily Load |
| USEPA | United States Environmental Protection Agency |
| WLA | Waste Load Allocation |
| WQBEL | Water Quality Based Effluent Limit |
| WQCC | New Mexico Water Quality Control Commission |
| WQMP | Water Quality Management Plan |
| WQS | Water Quality Standard(s) |
| WRAS | Watershed Restoration Action Strategy |

**List of Documents Included in this Plan by Reference**

New Mexico Water Quality Standards for Interstate and Intrastate Surface Waters [20.6.4 NMAC]

All TMDL documents individually listed in Work Element 1 of the Water Quality Management Plan

Clean Water Needs Survey

Memorandum of Understanding Between the U.S. Environmental Protection Agency Region 6 and the New Mexico Environment Department

New Mexico Continuing Planning Process

New Mexico Ground and Surface Water Protection Regulations [20.6.2 NMAC]

New Mexico Nonpoint Source Management Plan

Priority Rating System for Point Source, Non-Point Source and Brownfields Redevelopment Projects

Quality Assurance Project Plan for Water Quality Management Programs

**Preface**

This 2002 comprehensive update to the New Mexico Water Quality Management Plan (WQMP) represents an effort to modernize the WQMP. There are substantial changes in format to this document, many of which are intended to take advantage of technologies commonly available today that were non-existent or unavailable the last time the WQMP was comprehensively updated in 1981. These technologies primarily include widespread use of personal computers and rapid access to the Internet by ever-growing numbers of people. This document has been developed with capacity to be used as an electronic document that can be used via the Internet, stand-alone computer compact disc technology, or as a traditional paper document. Electronic users will find unprecedented access to reference documents and supplemental information through the use of hyperlinks embedded throughout the document. These hyperlinks (indicated by blue underlined text) have the capability to take the reader directly and immediately to referenced or supplemental information. For example, if there is a reference to a document such as the New Mexico Nonpoint Source Management Plan (a stand alone document that in itself is more than 150 pages) a hyperlink is provided that allows the reader to access a copy of the entire document. To avoid problems, all reference documents have been converted to a common and readily available electronic format. The common format is Adobe® Acrobat®. The Adobe® Acrobat® Reader® is widely used and available for free by contacting Adobe® at the following website: http://www.adobe.com/products/acrobat/readstep.html. For readers of this document who choose to use it more traditionally (i.e., as a paper document), citations of references are provided and or quoted to a large enough extent that the document remains useful. Regardless, copies of this document and the incorporated documents are available often through statewide repository libraries or by contacting the New Mexico Environment Department (www.nmenv.state.nm.us/) Surface Water Quality Bureau (www.nmenv.state.nm.us/swqb/swqb.html) in Santa Fe [(505) 827-0187].

The 2002 New Mexico WQMP update project has been carried out with a number of goals in mind. Many of the "work elements" adopted by the New Mexico Water Quality Control Commission over the many years have remained "on-the-books" even though they were completed or had become outdated or obsolete. In some respects the WQMP had become like an old fruit tree in need of pruning in order to restore its health and allow future growth. Indeed some work elements that remained "on-the-book" were adopted in the late 1970's. Many Clean Water Act programs have matured dramatically since the 1970's and 1980's. Some current programs or strategies did not exist in the late 1970s and early 1980s when many WQMP Work Element Strategies were first contemplated. One landmark event instituting change is the 1987 amendments to the Clean Water Act (P.L. 100-4). Prior to the 1987 amendments, Congress supported a construction grant program to assist local governments with funding wastewater treatment infrastructure improvements. After the 1987 amendment the grant program was transitioned to a revolving loan program. An example of a new program is the Nonpoint Source Management program that did not exist prior to adoption of §319 of the CWA in 1987. Many of the "old" pre-1987 WQMP strategies were directed at investigating and solving nonpoint source pollution problems. Since the enactment of §319, many of the nonpoint source management concerns have been rolled into a more efficient and better defined program.

The goals of this 2002 comprehensive update were to:

1. make what had become an obscure document more readily accessible and useable;
2. "prune" out old work elements and strategies that were either no longer required, completed, or simply outdated;
3. reorganize the document to track current federal requirements as found in the Code of Federal Regulations;
4. provide consolidation of the many partial updates (e.g., adoption of numerous Total Maximum Daily Load documents) that have occurred in recent years but have not been compiled in one accessible document;
5. provide a format that supports opportunity for future growth of the WQMP

This update is not intended to explore and incorporate all feasible new planning initiatives. Rather, the intent is to "prune" the document back to a "healthy" base upon which the future can grow.

**Introduction**

Water Quality Management Plans are required by federal statute (e.g., CWA §§ 208 and 303) and federal regulations (40 CFR 130). The New Mexico Water Quality Act also requires that the Water Quality Control Commission shall adopt a comprehensive water quality management program and develop a continuing planning process (§74-6-4.B NMSA 1978). The purpose of Water Quality Management Plans is best expressed in various subparts of 40 CFR 130. For example 40 CFR 130.0(a) states in-part:

> *The Water Quality Management (WQM) process described in the Act and in this regulation provides the authority for a consistent national approach for maintaining, improving and protecting water quality while allowing States to implement the most effective individual programs. The process is implemented jointly by EPA, the States, interstate agencies, areawide, local and regional planning organizations.*

In 40 CFR 130.0(e) it states in-part:

> *This process is a dynamic one, in which requirements and emphases vary over time. At present States have completed WQM plans which are generally comprehensive in geographic and programmatic scope. Technology based controls are being implemented for most point sources of pollution. However, WQS* [water quality standards] *have not been attained in many waterbodies and are threatened in others.*

Finally, in 40 CFR 130.6 it states in-part:

> *(a) Water quality management (WQM) plans. WQM plans consist of initial plans produced in accordance with sections 208 and 303(e) of the Act and certified and approved updates to those plans. Continuing water quality planning shall be based upon WQM plans and water quality problems identified in the latest 305(b) reports. State water quality planning should focus annually on priority issues and geographic areas and on the development of water quality controls leading to implementation measures. Water quality planning directed at the removal of conditions placed on previously*

*certified and approved WQM plans should focus on removal of conditions which will lead to control decisions.*

*(b) Use of WQM plans. WQM plans are used to direct implementation. WQM plans draw upon the water quality assessments to identify priority point and nonpoint water quality problems, consider alternative solutions and recommend control measures, including the financial and institutional measures necessary for implementing recommended solutions. State annual work programs shall be based upon the priority issues identified in the State WQM plan.*

*(c) WQM plan elements. Sections 205(j), 208 and 303 of the Act specify water quality planning requirements. The following plan elements shall be included in the WQM plan or referenced as part of the WQM plan if contained in separate documents when they are needed to address water quality problems.*

*(1) Total maximum daily loads….*
*(2) Effluent limitations….*
*(3) Municipal and industrial waste treatment….*
*(4) Nonpoint source management and control….*
*(5) Management agencies….*
*(6) Implementation measures….*
*(7) Dredge or fill program….*
*(8) Basin plans….*
*(9) Ground water….*

It is important to point out that the WQMP is one of many tools required by the CWA and the New Mexico Water Quality Act (NMWQA) in a programmatic approach to water quality protection. The WQMP is intended to work in conjunction with other important documents such as the Continuing Planning Process, the New Mexico Standards for Interstate and Intrastate Surface Waters as well as applicable laws and regulations.

In order to maintain the usefulness of this document into the future, documents that relate to required components of the WQMP (stipulated in 40 CFR 130.6(c)) have been incorporated by reference. Documents incorporated by reference may later be revised, after public notice and participation appropriate to each document. Such revised documents are considered to be incorporated herein by reference. Documents requiring approval by the U.S. Environmental Protection Agency (EPA) are considered incorporated after USEPA approval of the revised document. Accordingly, as referenced documents (e.g., Nonpoint Source Management Program, Continuing Planning Process) are updated, the WQMP is effectively updated. This approach is in keeping with current USEPA regulations found at 40 CFR 130.6(c).

**Work Element 1 – Total Maximum Daily Loads (TMDLs)**
(Revised: December 17, 2002)

**Requirements for Work Element 1**

Regulation 40 CFR 130.6(c)(1) requires: *TMDLs in accordance with sections 303(d) and (e)(3)(C) of the Act and Sec. 130.7 of this part*.

**Background**

TMDLs are a required component of the WQMP. However, according to federal regulations (40 CFR 130.6(c)), a plan element may be "referenced as part of the WQM plan if contained in separate documents." The process for development of TMDLs and individual water quality-based effluent limitations is contained in *State of New Mexico Continuing Planning Process, July 1998*. As TMDLs are developed and approved, they are incorporated into the water quality management plan and used as the basis for implementation of water pollution control activities.

A Total Maximum Daily Load (TMDL) can best be described as a budget for pollutant influx to a watercourse. A TMDL, in actuality, is a planning document. The "allowable budget" is determined based on the amount of pollutants that can be assimilated without causing the stream to exceed water quality standards set to protect the stream's designated uses (e.g., fishery, irrigation, etc.). The current pollutant loading is then determined by scientific study of a stream to assess the excess loading above the allowable budget. Because TMDLs are only written for impaired waterbodies, the current loading is known to be in excess of the allowable budget, or total maximum daily load. Subtracting the TMDL from the current excess load provides a calculation of the amount of load reduction necessary to bring the waterbody into compliance with state standards. Once this capacity is determined, sources of pollutants are considered and an implementation plan is described.

Both point and nonpoint pollutant sources must be included. Once all sources are accounted for, pollutants are then allocated or budgeted among sources in a manner that describes the amount (the total maximum load) that can be assimilated into the river without causing the stream standard or "budget" to be exceeded. Nonpoint sources are grouped into a "load allocation" (LA) and point sources are grouped into a "wasteload allocation" (WLA). By federal regulation, the budget must also include a "margin of safety" (MOS). TMDLs can also be described by the following equation:

$$TMDL = LA + WLA + MOS$$

Implementation of TMDLs is described in the "Process for Establishing and Assuring Implementation of Water Quality Standards" section of the *State of New Mexico Continuing Planning Process, July 1998*. In summary, WLA allocations are implemented through the National Pollutant Discharge Elimination System (NPDES) permit program for point source

discharges and the LA is implemented through the voluntary NM Nonpoint Source Management Program.

In 1996 two groups, Forest Guardians and Southwest Environmental Center, jointly filed a lawsuit against the USEPA alleging that adequate TMDLs had not been developed by the State as required under § 303 of the CWA. The State of New Mexico was not a litigant in this suit. In 1997 USEPA and plaintiffs negotiated a consent decree and settlement agreement avoiding formal litigation. The consent decree and the settlement agreement combined set forth a 20-year schedule to address TMDLs for many stream segments in the State. The USEPA and the New Mexico Environment Department have signed a Memorandum of Understanding outlining tasks the State will complete to meet the terms of the settlement.

TMDLs are "living documents" in that they should be periodically reviewed and updated as conditions and data change. The Environment Department Surface Water Quality Bureau has implemented a watershed based water quality monitoring strategy to continually gather new data. Currently, § 303 of the CWA requires states to review and update their "§ 303(d)" lists of impaired waters every two years. CWA § 303(d) further requires the development of a TMDL for a "§ 303(d)" listed water.

The following are tables of TMDLs adopted by the WQCC. The tables are organized first by river basin, then by year, then by water body (e.g., stream name):

### Canadian Basin TMDLs

| Year | Canadian Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 1999 | **Cieneguilla Creek** from the inflow to Eagle Nest Lake to the headwaters CR2-50000 (Canadian River Basin 2306) 13.6 miles for **fecal coliform**. | *Total Maximum Daily Load for Six-Mile Creek, Cieneguilla Creek, and Moreno Creeks – Cimarron Basin - Fecal Coliform* | November 9, 1999 | December 17, 1999 |
| 1999 | **Cieneguilla Creek** from the inflow to Eagle Nest Lake to the headwaters CR2-50000 (Canadian River Basin 2306) 13.6 miles for **turbidity** and **stream bottom deposits**. | *Total Maximum Daily Load for Turbidity, Stream Bottom Deposits, and Total Phosphorus in the Canadian River Basin (Cimarron)* | August 10, 1999 | September 30, 1999 |
| 1999 | **Moreno Creek** from the inflow to Eagle Nest Lake to the headwaters CR2-30000 (Canadian River Basin 2306) 14.4 miles for **turbidity**. | *Total Maximum Daily Load for Turbidity, Stream Bottom Deposits, and Total Phosphorus in the Canadian River Basin (Cimarron)* | August 10, 1999 | September 30, 1999 |
| 1999 | **Moreno Creek** from the inflow to Eagle Nest Lake to the headwaters CR2-30000 (Canadian River Basin 2306) 14.4 miles for **fecal coliform**. | *Total Maximum Daily Load for Six-Mile Creek, Cieneguilla Creek, and Moreno Creeks – Cimarron Basin - Fecal Coliform* | November 9, 1999 | December 17, 1999 |

| Year | Canadian Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 1999 | **North Ponil Creek** from the confluence with South Ponil Creek to the mouth of McCrystal Creek CR2-10400 (Canadian River Basin 2306) 17.6 miles for **turbidity, stream bottom deposits**, and total **phosphorus**. | *Total Maximum Daily Load for Turbidity, Stream Bottom Deposits, and Total Phosphorus in the Canadian River Basin (Cimarron)* | August 10, 1999 | September 30, 1999 |
| 1999 | **North Ponil Creek** from the confluence with South Ponil Creek to the mouth of McCrystal Creek CR2-10400 (Canadian River Basin 2306) 10 miles for **temperature**. | *Total Maximum Daily Load For Temperature On North Ponil Creek Canadian River Basin (Cimarron)* | November 9, 1999 | December 17, 1999 |
| 1999 | **Six-Mile Creek** the inflow to Eagle Nest Lake to headwaters CR2-40000 (Canadian River Basin 2306) 6.6 miles for **turbidity**. | *Total Maximum Daily Load for Turbidity, Stream Bottom Deposits, and Total Phosphorus in the Canadian River Basin (Cimarron)* | August 10, 1999 | September 30, 1999 |
| 1999 | **Six-Mile Creek** the inflow to Eagle Nest Lake to headwaters CR2-40000 (Canadian River Basin 2306) 6.6 miles for **fecal coliform**. | *Total Maximum Daily Load for Six-Mile Creek, Cieneguilla Creek, and Moreno Creeks – Cimarron Basin - Fecal Coliform* | November 9, 1999 | December 17, 1999 |
| 2000 | **Cieneguilla Creek** from the inflow to Eagle Nest Lake to the headwaters CR2-50000 (Canadian River Basin 2306) 13.6 miles for metals (chronic **aluminum**). | *Total Maximum Daily Load For Metals (Chronic Aluminum) In Cieneguilla Creek* | December 12, 2000 | February 16, 2001 |
| 2000 | **Cimarron River** from the mouth on the Canadian River to Turkey Creek (CR2-10000) 35.5 miles for metals (chronic **aluminum**). | *Total Maximum Daily Load For Stream Bottom Deposits In Rayado Creek And Metals (Chronic Aluminum) In The Cimarron River* | December 12, 2000 | February 16, 2000 |
| 2000 | **Rayado Creek** from the mouth on the Cimarron River to Miami Lake diversion (CR2-10100) 16.5 miles for **stream bottom deposits**. | *Total Maximum Daily Load For Stream Bottom Deposits In Rayado Creek And Metals (Chronic Aluminum) In The Cimarron River* | December 12, 2000 | February 16, 2000 |
| 2001 | **Middle Ponil Creek** from the confluence with South Ponil Creek to the headwaters (Canadian River, 2306) for **temperature**. | *Total Maximum Daily Load For Temperature On Middle Ponil Creek* | July 10, 2001 | September 27, 2001 |
| 2001 | **Middle Ponil Creek** from the confluence with South Ponil Creek to the headwaters (Canadian River, 2306) for **turbidity**. | *Total Maximum Daily Load for Turbidity in Middle Ponil and Ponil Creek* | July 10, 2001 | September 27, 2001 |

| Year | Canadian Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 2001 | **Ponil Creek** from the mouth on the Cimarron River to the confluence of North Ponil and South Ponil Creeks (Canadian River, 2306) metals (chronic **aluminum**). | *Total Maximum Daily Load For Metals (Chronic Aluminum) In Ponil Creek* | July 10, 2001 | September 27, 2001 |
| 2001 | **Ponil Creek** from the mouth on the Cimarron River to the confluence of North Ponil and South Ponil Creeks (Canadian River, 2306) **temperature**. | *Total Maximum Daily Load For Temperature On Ponil Creek* | July 10, 2001 | September 27, 2001 |
| 2001 | **Ponil Creek** from the mouth on the Cimarron River to the confluence of North Ponil and South Ponil Creeks (Canadian River, 2306) **turbidity**. | *Total Maximum Daily Load for Turbidity in Middle Ponil and Ponil Creek* | July 10, 2001 | September 27, 2001 |

## Rio Grande Basin TMDLs

### TMDLs Completed Prior to 1999[1]

*Point Source Load Allocation for the Twining Water and Sanitation District (NPDES Permit NM0022101), Taos County, New Mexico.* 1981. [Table 1-1]

*Point Source Load Allocation for the Town of Red River (NPDES Permit NM0024899, Taos County, New Mexico.* 1982. [Table 1-2]

*Point Source Load Allocation for the City of Grants, Cibola County, New Mexico (NPDES Permit No. NM0020737).* 1989. [Table 1-3]

[1] Prior to the 2001 revision of the WQMP, TMDLs were categorized in Work Element 6 of the WQMP. TMDLs previously adopted as Work Element 6 have been "relocated" to Work Element 1. The Point Source Load Allocation tables presented herein are copied from the former Work Element 6.

## TMDLs Completed After 1999

| Year | Rio Grande Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 1999 | **Cordova Creek** from the mouth on Costilla to headwaters URG1-30300 (Rio Grande 2120) 3.8 miles for **turbidity, stream bottom deposits**, and **total phosphorus**. | *Total Maximum Daily Load For Turbidity, Stream Bottom Deposits And Total Phosphorus For Cordova Creek* | November 9, 1999 | December 17, 1999 |
| 1999 | **Jemez River** from Rio Guadalupe to the confluence of the East Fork of the Jemez River and San Antonio Creek MRG2-20000 (Rio Grande 2105.5 and 2106) 6.4 miles for **turbidity** and **stream bottom deposits**. | *Total Maximum Daily Load For Turbidity And Stream Bottom Deposits In The Rio Grande Basin (Jemez)* | October 12, 1999 | December 2, 1999 |
| 1999 | **Middle Rio de las Vacas** from the confluence with the Rio Cebolla to Rito de las Palomas MRG2-20200 (Rio Grande 2106) 2 miles for **temperature**. | *Total Maximum Daily Load (TMDL) For Temperature On The Middle Rio de las Vacas* | October 12, 1999 | December 2, 1999 |
| 1999 | **Redondo Creek** from the mouth on Sulphur Creek to the headwaters MRG2-40100 (Rio Grande 2106) 5.2 miles for total **phosphorus**. | *Total Maximum Daily Load For Total Phosphorus For Redondo Creek* | October 12, 1999 | December 2, 1999 |
| 1999 | **Rio Chamita** from the confluence of the Rio Chama to the New Mexico - Colorado border total **phosphorus**, total **ammonia**, and **fecal coliform**. | *Total Maximum Daily Load For The Rio Chamita From The Confluence Of The Rio Chama To The New Mexico - Colorado Border* | August 10, 1999 | September 30, 1999 |
| 1999 | **Rio Chamita** from mouth on the Rio Chama to New Mexico-Colorado border URG2-30500, Rio Grande 2116 12.6 miles for **temperature**. | *Total Maximum Daily Load For Temperature On The Rio Chamita* | November 9, 1999 | December 17, 1999 |
| 1999 | **Rio Guadalupe** from the mouth on the Jemez River to the confluence of the Rio de las Vacas and Rio Cebolla MRG2-20100 (Rio Grande 2106) 2.4 miles for **turbidity** and **stream bottom deposits**. | *Total Maximum Daily Load For Turbidity And Stream Bottom Deposits In The Rio Grande Basin (Jemez)* | October 12, 1999 | December 2, 1999 |
| 2000 | **Santa Fe River** from the Cochiti Pueblo to the Santa Fe WWTP URG1-10300 (Rio Grande 2110) 12.7 miles for **chlorine** and **stream bottom deposits**. | *Water Quality Assessment For The Santa Fe River From The Cochiti Pueblo To The Santa Fe Wastewater Treatment Plant For Chlorine And Stream Bottom Deposits* | January 11, 2000 | March 20, 2000 |

| Year | Rio Grande Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 2000 | **Santa Fe River** from the Cochiti Pueblo to the Santa Fe WWTP URG1-10300 (Rio Grande 2110) 12.7 miles for **dissolved oxygen** and **pH**. | *Total Maximum Daily Load For The Santa Fe River For Dissolved Oxygen and pH* | December 12, 2000 | January 11, 2001 |
| 2001 | **Middle Rio Grande** from northern border of Isleta Pueblo to the southern border of the Santa Ana Pueblo, (Rio Grande, 2105, 2105.1) for **fecal coliform bacteria**. | *Middle Rio Grande Total Maximum Daily Load (TMDL) for Fecal Coliform* | November 13, 2001 | May 3, 2002 |
| 2002 | **Clear Creek** from the confluence with the Rio de las Vacas to San Gregorio Reservoir, (Rio Grande 20.6.4.108) for **turbidity**. | *Total Maximum Daily Load for Clear Creek for Turbidity* | December 16, 2002 | Pending |
| 2002 | **East Fork of the Jemez River** from the confluence with San Antonio Creek to the headwaters, (Rio Grande 20.6.4.108) for **turbidity.** | *Total Maximum Daily Load for East Fork of the Jemez River for Turbidity* | December 16, 2002 | Pending |
| 2002 | **Jemez River** from Rio Guadalupe to the confluence of the East Fork of the Jemez River and San Antonio Creek, (Rio Grande 20.6.4.108) for **metal (chronic aluminum)**. | *Total Maximum Daily Load for Jemez River Metal (Chronic Aluminum)* | December 16, 2002 | Pending |
| 2002 | **Redondo Creek** from mouth on Sulphur Creek to the headwaters, (Rio Grande 20.6.4.108) for **temperature** and **turbidity**. | *Total Maximum Daily Load for Redondo Creek for Temperature and Turbidity* | December 16, 2002 | Pending |
| 2002 | **Rio Cebolla** from the confluence with the Rio de las Vacas to Fenton Lake, (Rio Grande 20.6.4.108) for **stream bottom deposits**. | *Total Maximum Daily Load for Rio Cebolla for Stream Bottom Deposits* | December 16, 2002 | Pending |
| 2002 | **Rio Cebolla** from the inflow to Fenton Lake to the headwaters, (Rio Grande 20.6.4.108) for **temperature** and **stream bottom deposits**. | *Total Maximum Daily Load for Rio Cebolla for Temperature and Stream Bottom Deposits* | December 16, 2002 | Pending |
| 2002 | **Rio de las Vacas** from the confluence with Rio Cebolla to Rio de las Palomas, (Rio Grande 20.6.4.108) for **temperature**. | *Total Maximum Daily Load for Rio de las Vacas for Temperature* | December 16, 2002 | Pending |
| 2002 | **Rio Guadalupe** from the mouth on the Jemez River to the confluence of the Rio de las Vacas and Rio Cebolla, (Rio Grande 20.6.4.108) for **metals (chronic aluminum)**. | *Total Maximum Daily Load for Rio Guadalupe for Metals (Chronic Aluminum)* | December 16, 2002 | Pending |

| Year | Rio Grande Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 2002 | **Rito Peñas Negras** from the mouth on the Rio de las Vacas to the headwaters, (Rio Grande 20.6.4.108) for **stream bottom deposits** and **temperature**. | *Total Maximum Daily Load for Rito Peñas Negras for Stream Bottom Deposits and Temperature* | December 16, 2002 | Pending |
| 2002 | **San Antonio Creek** from the confluence with the East Fork of the Jemez River to the headwaters, (Rio Grande 20.6.4.108) for **temperature** and **turbidity.** | *Total Maximum Daily Load for San Antonio Creek for Temperature and Turbidity* | December 16, 2002 | Pending |
| 2002 | **Sulphur Creek** above Redondo Creek to the headwaters, (Rio Grande 20.6.4.108) for **conductivity** and **pH**. | *Total Maximum Daily Load for Sulphur Creek for Conductivity and pH* | December 16, 2002 | Pending |

## Gila River Basin TMDLs

| Year | Gila River Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 2001 | **Black Canyon Creek** from the mouth on the East Fork of the Gila River to the headwaters (Gila River 20.6.4.503) **temperature**. | *Total Maximum Daily Load For Temperature On Black Canyon Creek* | November 13, 2001 | April 5, 2002 |
| 2001 | **Canyon Creek** from the mouth on the Middle Fork of the Gila to the headwaters, 4.5 mi. (Gila River 20.6.4.503) **turbidity**. | *Total Maximum Daily Load For Turbidity On Canyon Creek* | December 11, 2001 | April 10, 2002 |
| 2001 | **Canyon Creek** from the mouth on the Middle Fork of the Gila to the headwaters, 4.5 mi. (Gila River 20.6.4.503) **plant nutrients**. | *Total Maximum Daily Load For Plant Nutrients On Canyon Creek* | December 11, 2001 | April 10, 2002 |
| 2001 | **East Fork of the Gila River** from the confluence with the west fork to Taylor Creek (Gila River, 20.6.4.503) metals (**aluminum**). | *Total Maximum Daily Load For Metals (Chronic Aluminum) For The East Fork Of The Gila River And Taylor Creek* | November 13, 2001 | April 15, 2002 |
| 2001 | **Mangas Creek** from the mouth on the Gila River to Mangas Springs, 4.7 mi. (Gila River 20.6.4.502) **plant nutrients** | *Total Maximum Daily Load for Nutrients on Mangas Creek* | December 11, 2001 | April 16, 2002 |

| Year | Gila River Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 2001 | **Mogollon Creek**, perennial potions above the USGS gauge (Gila River 20.6.4.503) metals (**aluminum**). | *Total Maximum Daily Load For Metals (Chronic Aluminum) For Mogollon Creek* | November 13, 2001 | April 5, 2002 |
| 2001 | **Sapillo Creek** from the mouth on the Gila River to Lake Roberts, 5.0 mi. (Gila River 20.6.4.503) **turbidity**. | *Total Maximum Daily Load For Turbidity On Sapillo Creek* | December 11, 2001 | April 5, 2002 |
| 2001 | **Sapillo Creek** from the mouth on the Gila River to Lake Roberts, 5.0 mi. (Gila River 20.6.4.503) **total organic carbon**. | *Total Maximum Daily Load For Total Organic Carbon (TOC) On Sapillo Creek* | December 11, 2001 | April 5, 2002 |
| 2001 | **Taylor Creek** from the confluence with the Beaver Creek to Wall Lake (Gila River, 20.6.4.503) metals (**aluminum**). | *Total Maximum Daily Load For Metals (Chronic Aluminum) For The East Fork Of The Gila River And Taylor Creek* | November 13, 2001 | April 15, 2002 |
| 2001 | **Taylor Creek** from the confluence with the Beaver Creek to Wall Lake, 2.9 mi. (**temperature**). | *Total Maximum Daily Load For Temperature On Taylor Creek* | November 13, 2001 | August 5, 2002 |

## San Francisco River Basin

| Year | San Francisco River Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 2001 | **Centerfire Creek** from the mouth on the San Francisco River to the headwaters (San Francisco River 20.6.4.603) **conductivity**. | *Total Maximum Daily Load For Conductivity On Centerfire Creek* | November 13, 2001 | April 16, 2002 |
| 2001 | **Centerfire Creek** from the mouth on the San Francisco River to the headwaters, 7.1 mi. (San Francisco River Basin 20.6.4.603 **plant nutrients**. | *Total Maximum Daily Load For Plant Nutrients On Centerfire Creek* | December 11, 2001 | April 16, 2002 |
| 2001 | **San Francisco River** from Centerfire Creek to the New Mexico-Arizona border (San Francisco River 20.6.4.602) **temperature**. | *Total Maximum Daily Load For Temperature On The San Francisco River From Centerfire Creek To The New Mexico/Arizona Border* | November 13, 2001 | April 12, 2002 |

| Year | San Francisco River Basin Waterbody / TMDL Description | TMDL Document Name (Hyperlink to Document) | WQCC Adoption Date (Hyperlink to WQCC Meeting Minutes) | EPA Approval Date (Hyperlink to EPA Approval Letter) |
|---|---|---|---|---|
| 2001 | **San Francisco River** from Centerfire Creek upstream to the New Mexico/Arizona Border, 15 mi. (San Francisco River Basin 20.6.4.602 **plant nutrients**. | *Total Maximum Daily Load For Plant Nutrients On The San Francisco River from Centerfire Creek Upstream to the New Mexico/Arizona Border* | December 11, 2001 | August 5, 2002 |
| 2001 | **South Fork of Negrito Creek** from the confluence with the North Fork to the headwaters (San Francisco River 20.6.4.603) **temperature**. | *Total Maximum Daily Load For Temperature On The South Fork Of Negrito Creek From The Confluence With The North Fork To The Headwaters* | November 13, 2001 | April 5, 2002 |
| 2001 | **Tularosa River** from the mouth on the San Francisco River to Apache Creek (San Francisco River 20.6.4.603) **conductivity**. | *Total Maximum Daily Load For Conductivity On The Tularosa River* | November 13, 2001 | April 5, 2002 |
| 2001 | **Whitewater Creek** from the mouth on the San Francisco River to Whitewater Campground (San Francisco River 20.6.4.603) **turbidity**. | *Total Maximum Daily Load For Turbidity In Whitewater Creek* | November 13, 2001 | April 12, 2002 |
| 2001 | **Whitewater Creek** from the mouth on the San Francisco River to Whitewater Campground, 5.6 mi. (San Francisco River Basin 20.6.4.603) dissolved chronic **aluminum**. | *Total Maximum Daily Load For Chronic Aluminum On Whitewater Creek* | December 11, 2001 | April 12, 2002 |

### Strategy

1) The State of New Mexico will continue to develop TMDLs as specified in the CPP, and following the schedule and terms established in the federal Court monitored consent decree, the settlement agreement, and the MOU between the NMED and the USEPA. Additionally, the state will develop TMDLs as specified in negotiated Clean Water Act § 106 and § 104(b)(3) grant commitments. The State may also act independently of the aforementioned agreements to adopt TMDLs as it may find necessary and appropriate.

2) TMDLs are considered "living documents," and will be reviewed and revised as necessary as new water quality data are received and water quality standards are developed.

3) TMDL implementation will be addressed in individual TMDL documents. TMDL implementation will follow current federal statutory and regulatory structure that WLA allocations are implemented through the NPDES permit program for point

source discharges and the LA is implemented through the voluntary NM Nonpoint Source Management Program.

Work Element 1 Tables

## Table 1-1

Point Source Load Allocation for the Twining Water and Sanitation District (NPDES Permit No. NM0022101), Taos County, New Mexico

| Parameter | Time Interval | 7Q10 [A/] ($ft^3$/sec) | Effluent Volume (mgd) | Allowable Mass Load (kg/day) | Allowable 30-day Average Conc. (mg/l) | Allowable 7-day Average Conc. (mg/l) |
|---|---|---|---|---|---|---|
| 5-day biochemical oxygen demand | annual 3.3 | 0.095 | 10.8 | 30 | 45 | |
| total suspended solids | annual | 3.3 | 0.095 | 10.8 | 30 | 45 |
| fecal coliform bacteria | annual | 3.3 | 0.095 | ---- | 500[B/] | 500[B/] |
| total residual chlorine | annual | 3.3 | 0.095 | ---- | 0.04 | 0.04 |
| total ammonia nitrogen | annual | 3.3 | 0.095 | 10.8 | 30 | 30 |
| total phosphorus | January | 3.3 | 0.095 | 0.36 | 1.0 | 1.0 |
| | February | 3.3 | 0.095 | 0.36 | 1.0 | 1.0 |
| | March | 3.3 | 0.095 | 0.36 | 1.0 | 1.0 |
| | Apri1 | 4.4 | 0.095 | 0.36 | 1.0 | 1.0 |
| | May | 8.9 | 0.095 | 0.72 | 2.0 | 2.0 |
| | June | 8.9 | 0.095 | 0.72 | 2.0 | 2.0 |
| | July | 6.1 | 0.048 | 0.55 | 3.0 | 3.0 |
| | August | 5.7 | 0.048 | 0.55 | 3.0 | 3.0 |
| | September | 5.0 | 0.019 | 0.36 | 5.0 | 5.0 |
| | October | 4.5 | 0.019 | 0.36 | 5.0 | 5.0 |
| | November | 3.3 | 0.095 | 0.36 | 1.0 | 1.0 |
| | December | 3.3 | 0.095 | 0.36 | 1.0 | 1.0 |

[A/] The critical low flow condition in the Rio Hondo is the average low flow that persists for seven consecutive days once every ten years, on the average (7Q10).

[B/] Units are organisms per 100 ml.

**Table 1-2**

Point Source Load Allocation for the Town of Red River
(NPDES Permit No. NM0024899), Taos County, New Mexico

| Parameter | Time Interval | 7Q10 [A/] ($ft^3$/sec) | Effluent Volume (mgd) | Allowable Mass Load (kg/day) | Allowable 30-day Average Conc. (mg/l) | Allowable 7-day Average Conc. (mg/l) |
|---|---|---|---|---|---|---|
| 5-day biochemical oxygen demand | annual | 5.6 | 0.485 | 55.3 | 30 | 45 |
| total suspended solids | annual | 5.6 | 0.485 | 55.3 | 30 | 45 |
| fecal coliform bacteria | annual | 5.6 | 0.485 | ---- | 500[B/] | 500[B/] |
| total residual chlorine | annual | 5.6 | 0.485 | ---- | 0.02 | 0.02 |
| total phosphorus | January | 6.1 | 0.388 | 1.5 | 1.0 | 1.0 |
| | February | 5.9 | 0.388 | 1.5 | 1.0 | 1.0 |
| | March | 5.9 | 0.388 | 1.5 | 1.0 | 1.0 |
| | April | 8.4 | 0.097 | 0.37 | 1.0 | 1.0 |
| | May | 16.3 | 0.097 | 2.8 | 7.5 | 7.5 |
| | June | 18.0 | 0.485 | 3.1 | 1.7 | 1.7 |
| | July | 12.3 | 0.485 | 2.2 | 1.2 | 1.2 |
| | August | 11.3 | 0.485 | 2.2 | 1.2 | 1.2 |
| | September | 10.7 | 0.097 | 1.8 | 5.0 | 5.0 |
| | October | 9.4 | 0.097 | 1.5 | 4.0 | 4.0 |
| | November | 7.4. | 0.388 | 1.5 | 1.0 | 1.0 |
| | December | 5.6 | 0.388 | 1.5 | 1.0 | 1.0 |
| total ammonia nitrogen | January | 6.1 | 0.388 | 44.0 | 30 | 30 |
| | February | 5.9 | 0.388 | 44.0 | 30 | 30 |
| | March | 5.9 | 0.388 | 29.4 | 20 | 20 |
| | April | 8.4 | 0.097 | 7.3 | 20 | 20 |
| | May | 16.3 | 0.097 | 11.0 | 30 | 30 |
| | June | 18.0 | 0.485 | 36.7 | 20 | 20 |
| | July | 12.3 | 0.485 | 25.7 | 14 | 14 |
| | August | 11.3 | 0.485 | 33.0 | 18 | 18 |
| | September | 10.7 | 0.097 | 11.0 | 30 | 30 |
| | October | 9.4 | 0.097 | 11.0 | 30 | 30 |
| | November | 7 4 | 0.388 | 44.0 | 30 | 30 |
| | December | 5.6 | 0.388 | 44.0 | 30 | 30 |

[A/] The critical low flow condition in the Rio Hondo is the average low flow that persists for seven consecutive days once every ten years, on the average (7Q10).

[B/] Units are organisms per 100 ml

**Table 1-3**

Point Source Allocation for the City of Grants
(NPDES Permit No. NM 0020737), Cibola County, New Mexico.

| Parameter | 7Q10[1] (ft3/sec) | TMDL[2] (kg/day) | Measured Back-ground (kg/day) | Allowable Mass Load (kg/day) | Allowable Average Conc. (mg/1) | Allowable Maximum Conc. (mg/1) |
|---|---|---|---|---|---|---|
| Total phosphorus (as P) | 3.1 | 1.51 | 0.76 | 0.75 | 0.1 | 0.1 |
| Total inorganic nitrogen (as N) ($NH_3$ + $NH_4$ + $N0_2$ + $N0_3$) | 3.1 | 30.2 | 9.1 | 21.1 | 2.8 | 2.8 |
| Total ammonia (as N) | 3.1 | 1.89 | 1.14 | 0.75 | 0.15 | 0.15 |
| Fecal coliform bacteria | NA | NA | NA | NA | 100[4] | 100 |
| Total chlorine residual | NA | NA | NA | NA | 0.005[5] | 0.005 |
| Biochemical oxygen demand (5-day) | NA | NA | NA | 227[6] | 30 | NA |
| Total suspended solids | NA | NA | NA | 227[6] | 30 | NA |

[1]The minimum average seven consecutive day flow which occurs with a frequency of once in ten years.
[2]Total maximum daily load (TMDL) = (7Q10 + WWTF design flow (3.08 $ft^3$/sec)) X WQS X 2.447.
[3]WLA (waste load allocation) = TMDL - MBG (measured background).
[4]Units are 100 organisms per 100 ml.
[5]A water quality-based effluent limitation based on implementation of Section 1-102.F, Hazardous Substances, of the state's water quality standards.
[6]Loads and concentrations for BOD (5-day) and TSS are based on EPA's secondary treatment regulations (40 CFR Part 133); they are not based on water quality standards or TMDL

**Work Element 2 – Effluent Limitations**
(Revised: December 17, 2002)

**Requirements for Work Element 2**

Regulation 40 CFR 130.6(c)(2) requires: "*[e]ffluent limitations including water quality based effluent limitations and schedules.*"

**Background**

The "Effluent Limitations" element is a required (40 CFR 130.6(c)) element in the WQMP. However, according to the same regulation, a plan element may be "…referenced as part of the WQM plan if contained in separate documents…." A plan for effluent limitations is contained in *State of New Mexico Continuing Planning Process, July 1998* (CPP). An Implementation Plan is also incorporated in the NM Standards for Interstate and Intrastate Surface Waters[2]. The intent of this element of the WQMP is to supplement, but not supersede, the CPP and the water quality standards.

As specified in the CPP, the WQCC has determined that the primary mechanism for controlling point source discharges to surface waters ("waters of the United States"[3]) in New Mexico is the NPDES permit program established under § 402 of the federal CWA. The USEPA Region 6 in Dallas, Texas is responsible for issuing NPDES permits in New Mexico that specify the amount and concentration of contaminants that a permittee may discharge to a surface waterbody. The USEPA is also responsible for the enforcement of effluent limitations stipulated by NPDES permits. An unofficial list of NPDES permits may be viewed on the NMED's web page at http://www.nmenv.state.nm.us/swqb/psrlist.html.

Federal regulations, among other requirements, require NPDES permits include **technology based effluent limitations** and other necessary effluent limitations for toxic pollutants and sewage sludge[4]. The USEPA is responsible for development and promulgation of technology based effluent limitations pursuant to §§ 301, 304, 306, 307, and 316 of the Clean Water Act. Federally promulgated technology based effluent limitations are published by USEPA in the Code of Federal Regulations[5].

Federal regulations require NPDES permits must, contain **water quality based effluent limits** (WQBELs)[6] when necessary to protect applicable water quality standards for the receiving water adopted in accordance with CWA § 303. Therefore, WQBELs are required where technology

[2] 20.6.4 NMAC.
[3] As defined in 40 CFR 122.2.
[4] Refer to 40 CFR 122.44(a) and 40 CFR 122.44(b) for more detail.
[5] The term technology based effluent limitations in this section generally refers to the "Secondary Treatment Regulation" (40 CFR 133) for publicly owned treatment works (POTWs); the "Effluent Guidelines and Standards" (40 CFR Subchapter N) for non POTWs, and/or technology based effluent limitations based upon the "best professional judgment" (BPJ) of the permit writer where appropriate. BPJ is usually considered where technology based effluent limitations have not been previously established in regulation for a particular industry.
[6] Refer to 40 CFR 122.44(d) for more detail.

based effluent limits are not sufficient to protect water quality standards. WQBELs may be calculated at the time a permit is issued by the permitting agency or WQBELs may be calculated as part of a WLA in a TMDL.

Federal regulations require NPDES permits must implement (be consistent with) State adopted water quality management plans[7] (e.g., WLAs in TMDLs in Work Element 1 of this WQMP).

The WQCC is authorized under the New Mexico Water Quality Act (NMWQA) [§ 74-6-1 et seq. NMSA 1978] to adopt regulations, including effluent limitations for the protection of surface water quality. The WQCC has adopted regulations for protection of surface water quality specifying effluent limitations under certain specified conditions. These regulations are found in Subpart 2 of the WQCC's Ground and Surface Water Protection Regulations[8]. Effluent limitations for discharges to surface and ground waters are adopted in accordance with all requirements (e.g., public participation) specified in the NMWQA.

The WQCC has, in addition to adopting regulations specifying effluent limitations for discharges to surface waters, previously adopted as part of this WQMP a strategy to control the pH of discharges and the discharge of pathogens (as indicated by fecal coliform bacteria) for the protection of public health and the environment.

The WQCC has adopted, and periodically revises, water quality standards for surface waters in the State of New Mexico. The WQCC through the water quality standards allows, in specified circumstances, schedules of compliance to be included in NPDES permits[9]. Federal regulation also allows for schedules of compliance in NPDES permits under certain limitations[10]. Such schedules of compliance will be for the purpose of providing a permittee with adequate time to make treatment facility modifications necessary to comply with water quality based limitations determined to be necessary to implement new or revised water quality standards. Implementation of schedules of compliance should be in accordance with provisions of the NPDES regulations and the water quality standards.

Where a State, such as New Mexico, is not delegated primacy for the issuance of federal permits (e.g., NPDES permits) pursuant to Section 402 of the federal Clean Water Act, the State in which the discharge originates is authorized to review discharges (and permits) to ensure the discharge will: 1) be compatible with appropriate state law; 2) protect water quality standards adopted in accordance with § 303 of the CWA; and 3) implement an effective water quality management plan. In such review, or certification, the State may: 1) approve the discharge without condition; 2) approve the discharge subject to conditions necessary to meet one of the three aforementioned criteria; 3) deny certification; or 4) waive certification. The NMWQA[11] assigns the responsibility for certifying permits issued under the CWA to the New Mexico Environment Department. The NMWQA also specifies[12] conditions where a certification shall be denied.

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[7] 40 CFR 122.44(d)(6) and 40 CFR 130.12(a)
[8] 20.6.2 NMAC
[9] Subsection J of 20.6.4.11 NMAC
[10] 40 CFR 122.47
[11] § 74-6-4.E - NMSA 1978, 1993 Replacement Pamphlet
[12] § 74-6-5.E - NMSA 1978, 1993 Replacement Pamphlet

**Strategy**

1) The CPP is incorporated herein by reference. Effluent limits and decisions regarding effluent limits should be consistent with the CPP.

2) The NPDES permitting authority will incorporate, as appropriate, technology based effluent limitations in NPDES permits in accordance with federal NPDES regulations;

3) The NPDES permitting authority will review NPDES permit applications and relevant water quality data to determine and include water quality based effluent limits as appropriate and necessary to protect water quality standards;

4) The NPDES permitting authority will incorporate WLAs for point source discharges adopted in TMDLs by the WQCC and approved by the USEPA as part of this WQMP (see Work Element 1);

5) The NM Environment Department will review NPDES permit actions for purposes of state certification[13]. The Environment Department will assure through appropriate review and communication with the permitting authority that permit requirements and effluent limitations are: compatible with appropriate state law, protect water quality standards and implement the water quality management plan.

6) The Environment Department will use the effluent limitation[14] of 500 fecal coliform bacteria per 100 milliliters and the range 6.0- 9.0 for pH for state certifications of NPDES permits except when:

   a. more stringent limitations are needed to meet the antidegradation policy and implementation plan of the New Mexico Water Quality Standards, (20.6.4 NMAC);

   b. the WQCC has adopted more stringent limitation in a point source load allocation.

   In all cases, state-certified effluent limitations for fecal coliform bacteria and pH shall be stringent enough so that receiving waters meet water quality standards.

[13] CWA § 401 and NMWQA § 74-6-4.E.
[14] Strategy number 6 was originally adopted by the WQCC in 1989 in Work Element 6. This strategy is relocated without amendment to this Work Element for continuity.

**Work Element 3 – Municipal and Industrial Waste Treatment**
(Revised: December 17, 2002)

**Requirements for Work Element 3**

Regulation 40 CFR 130.6(c)(3) requires:

> *Identification of anticipated municipal and industrial waste treatment works, including facilities for treatment of stormwater-induced combined sewer overflows; programs to provide necessary financial arrangements for such works; establishment of construction priorities and schedules for initiation and completion of such treatment works including an identification of open space and recreation opportunities from improved water quality in accordance with section 208(b)(2) (A) and (B) of the Act.*

**Background**

New Mexico's plan for waste treatment is addressed in two documents.

The first document is the *Clean Water Needs Survey* (CWNS) that

> *... is required by Sections 205(a) and 516(b)(1) of the CWA. The CWNS is a summary of the estimated capital costs for water quality projects and other activities eligible for SRF support as authorized by the 1987 CWA Amendments. These activities include both facilities and certain water quality program elements. Activities include the planning, design, and construction of publicly owned wastewater collection and treatment systems and projects controlling CSOs, SW, and NPS pollutants. Other eligible water quality program elements are those that involve one-time expenditures supporting the CWA goals, such as program development and implementation*. [From introduction to EPA's "1996 Clean Water Needs Survey Report to Congress -- (EPA 832-R-97-003)]]

In the past the State of New Mexico has participated in these surveys by collecting information and submitting it to the EPA for inclusion in periodic (once every four years) reports Congress. The 1996 Clean Water Needs Survey Report to Congress (EPA 832-R-97-003) is the most recent and current version of the report. More information about the Clean Water Needs Survey and electronic access to the report may be found on the USEPA's website at http://www.epa.gov/owmitnet/mtb/cwns/index.htm

The second document is the *Priority Rating System for Point Source, Nonpoint Source and Brownfields Redevelopment Projects*. Previous priority rating systems for evaluating proposed projects for CWSRF funding were limited to point source discharges. In 2000, NMED's Construction Programs Bureau, in consultation with the Surface Water Quality and Ground

Water Quality Bureaus, revised and prepared an update to the WQCC's 1986 *Water Quality Control Commission Priority Rating System for Wastewater Facility Construction Loan Projects*. The revisions were adopted by the WQCC in a document now known as the *Water Quality Control Commission Priority Rating System for Point Source, Non-Point Source and Brownfields Redevelopment Projects*.

**Strategy**

1) The 1996 CWNS is incorporated into the WQMP by reference.

2) The State of New Mexico, principally through the New Mexico Environment Department, will continue to participate in future CWNS data collection efforts.

3) Future CWNS Reports, when finalized by EPA and sent to Congress as required by law, will be automatically incorporated by reference into this element of the WQMP.

4) The 2000 *Water Quality Control Commission Priority Rating System for Point Source, Non-Point Source and Brownfields Redevelopment Projects* is incorporated into the WQMP by reference.

5) Future revisions of the *Priority Rating System for Point Source, Non-Point Source and Brownfields Redevelopment Projects* when adopted by the WQCC will be automatically incorporated into this element of the WQMP by reference.

6) New Mexico priorities under this Work Element will be guided by the above documents.

**Work Element 4 – Nonpoint Source Management and Control**
(Revised: December 17, 2002)

**Requirements for Work Element 4**

Regulation 40 CFR 130.6(c)(4) requires:

> *(i) The* [Water Quality Management] *plan shall describe the regulatory and non-regulatory programs, activities and Best Management Practices (BMPs) which the agency has selected as the means to control nonpoint source pollution where necessary to protect or achieve approved water uses. Economic, institutional, and technical factors shall be considered in a continuing process of identifying control needs and evaluating and modifying the BMPs as necessary to achieve water quality goals.*
>
> *(ii) Regulatory programs shall be identified where they are determined to be necessary by the State to attain or maintain an approved water use or where non-regulatory approaches are inappropriate in accomplishing that objective.*
>
> *(iii) BMPs shall be identified for the nonpoint sources identified in section 208(b)(2)(F)-(K) of the Act and other nonpoint sources as follows:*
>
> *(A) Residual waste. Identification of a process to control the disposition of all residual waste in the area which could affect water quality in accordance with section 208(b)(2)(J) of the Act.*
>
> *(B) Land disposal. Identification of a process to control the disposal of pollutants on land or in subsurface excavations to protect ground and surface water quality in accordance with section 208(b)(2)(K) of the Act.*
>
> *(C) Agricultural and silvicultural. Identification of procedures to control agricultural and silvicultural sources of pollution in accordance with section 208(b)(2)(F) of the Act.*
>
> *(D) Mines. Identification of procedures to control mine-related sources of pollution in accordance with section 208(b)(2)(G) of the Act.*
>
> *(E) Construction. Identification of procedures to control construction related sources of pollution in accordance with section 208(b)(2)(H) of the Act.*
>
> *(F) Saltwater intrusion. Identification of procedures to control saltwater intrusion in accordance with section 208(b)(2)(I) of the Act.*
>
> *(G) Urban stormwater. Identification of BMPs for urban stormwater control to achieve water quality goals and fiscal analysis of the necessary capital and operations and maintenance expenditures in accordance with section 208(b)(2)(A) of the Act.*
>
> *(iv) The nonpoint source plan elements outlined in Sec. 130.6(c) (4)(iii)(A)(G) of this regulation shall be the basis of water quality activities implemented through agreements or memoranda of understanding between EPA and other departments, agencies or instrumentalities of the United States in accordance with section 304(k) of the Act.*

**Background**

As defined in federal regulations (40 CFR 122.2), a point source is a discrete discharge of pollutants, as through a pipe or similar conveyance (e.g., a ditch). A nonpoint source (NPS) is essentially any source of pollutant(s) that is not a point source.

Nonpoint sources of water pollution are now widely recognized as the biggest contributors to water pollution in New Mexico, as well as the nation. Principal sources of surface water NPS pollution in New Mexico include erosion from rangelands, agricultural activities, construction, silviculture, resource extraction, land disposal, unsurfaced roads, and recreation. Hydromodification may affect attainment of designated uses by diverting water out of stream channels, by impounding waters, through streambed channelization, and dredge-and-fill activities. Principal known sources of NPS ground water pollution in rural and suburban areas include household septic tanks, cesspools, and agricultural activities.

NPS management is a required component of the WQMP. However, according to federal regulations (40 CFR 130.6(c)), a plan element may be "referenced as part of the WQM plan if contained in separate documents." New Mexico's plan for management of NPS pollution is described in the CPP under the *Process for Establishing and Assuring Implementation of Water Quality Standards* and in *New Mexico Nonpoint Source Management Program, October 1999* (NPSMP).

**Strategy**

1) Relevant portions of the CPP and the *New Mexico Nonpoint Source Management Program, October 1999* are incorporated into the WQMP by reference.

2) Future CPP revisions, when adopted by the WQCC and approved by the EPA as required by law, will be automatically incorporated by reference into this element of the WQMP.

3) Future revisions to the *New Mexico Nonpoint Source Management Program* will be automatically incorporated by reference into this element of the WQMP upon their approval by USEPA.

4 Revisions to the *New Mexico Nonpoint Source Management Program* will be made and implemented on an as needed basis.

**Work Element 5 – Management Agencies**
(Revised: December 17, 2002)

## Requirements for Work Element 5

Regulation 40 CFR 130.6(c)(5) requires:

> [i]*dentification of agencies necessary to carry out the plan and provision for adequate authority for intergovernmental cooperation in accordance with sections 208(b)(2)(D) and 303(e)(3)(E) of the Act. Management agencies must demonstrate the legal, institutional, managerial and financial capability and specific activities necessary to carry out their responsibilities in accordance with section 208(c)(2)(A) through (I) of the Act.*

## Introduction

Prior to the 2001 revision of the Water Quality Management Plan (WQMP), Management Agencies were addressed in Work Element 13 of the WQMP. Management agencies previously designated in Work Element 13 have been "relocated" to Work Element 5.

## I. -- Wastewater Management

### Background

Under § 208 of the Federal Clean Water Act, WQMPs are to include identification of agencies necessary to implement the Plan and provision for adequate authority for intergovernmental cooperation. Designated Management Agencies (DMAs) must demonstrate legal, institutional, managerial, and financial capability, and specific activities necessary to carry out their responsibilities. As specified at 40 CFR 130.12(b), CWA Section 201 funding can only be awarded to DMAs that are in conformance with the statewide WQMP. Accordingly, 84 municipalities (including Los Alamos County), 2 counties, 11 sanitation or water and sanitation districts, 4 state agencies, and 2 Native American tribal entities have been designated wastewater management agencies. One of the two Native American Tribal entities, the Navajo Tribal Utility Authority, has been designated as an interim wastewater management agency.

The WQCC has the responsibility for designating management agencies. Under federal regulations[15], management agency designations must be certified by the Governor, and the EPA Administrator shall accept such designations unless he/she finds that the designated management agencies do not have adequate specified authorities required in § 208 (c)(2).

[15] 40 CFR 130.6(e)

The Governor certified the designation of 97 wastewater management agencies in 1980. Other additional management agencies were certified in September 1983, August 1984, October 1985, April 1999, and May 2001. A total of 103 wastewater management agencies have been designated.

Incorporated municipalities, counties, and sanitation and water and sanitation districts have the necessary authorities under state law to satisfy the requirements of Section 208(c)(2) of the CWA. State law provides the designated State agencies with the necessary authority to design, construct, operate, and maintain wastewater treatment plants and to accept and utilize State and/or Federal funds for these purposes.

The Navajo Tribal Authority has been delegated the necessary authority by the Navajo Tribal Council to satisfy the requirements of Section 208(c)(2) of the CWA. The Navajo water Commission, the agency responsible for Section 208 planning on the Navajo Reservation, has determined that the Authority should be an interim management agency with the designation to be reviewed annually.

The Pueblo of Pojoaque is a Federally recognized Indian tribal entity and has adequate authority over facilities under its jurisdiction to serve appropriately as a wastewater management agency.

Designated wastewater management agencies are listed in the following tables. Each agency that has accepted this designation shall be responsible for wastewater management in its facility planning area and shall, if the agency satisfies applicable Federal regulations, be able to receive Section 201 construction grants funding.

## Designated Management Agencies for Wastewater Management

| INCORPORATED MUNICIPALITIES<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Alamogordo | X | |
| Albuquerque | X | |
| Artesia | X | |
| Aztec | X | |
| Bayard | X | |
| Belen | X | |
| Bernalillo | X | |
| Bloomfield | X | |
| Capitan | X | |
| Carlsbad | X | |
| Carrizozo | X | |
| Causey | X | |
| Chama | X | |
| Cimarron | X | |
| Clayton | X | |
| Cloudcroft | X | |
| Clovis | X | |
| Columbus | X | |
| Corona | X | |
| Cuba | X | |
| Deming | X | |
| Des Moines | X | |
| Dexter | X | |
| Dora | X | |
| Eagle Nest | X | |
| Elida | X | |
| Encino | X | |
| Espanola | X | |
| Estancia | X | |
| Eunice | X | |
| Farmington | X | |
| Floyd | X | |
| Folsom | X | |
| Fort Sumner | X | |
| Gallup | X | |
| Grady | X | |
| Grants | X | |
| Grenville | | X |
| Hagerman | X | |

| INCORPORATED MUNICIPALITIES<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Hatch | X | |
| Hobbs | X | |
| Hope | | X |
| House | X | |
| Jal | X | |
| Jemez Springs | X | |
| Lake Arthur | X | |
| Las Cruces | X | |
| Las Vegas | X | |
| Logan | X | |
| Lordsburg | X | |
| Los Alamos County | X | |
| Los Lunas | X | |
| Loving | X | |
| Lovington | X | |
| Magdalena | X | |
| Maxwell | X | |
| Melrose | X | |
| Moriarity | X | |
| Mosquero | X | |
| Mountainair | X | |
| Pecos | X | |
| Portales | X | |
| Questa | X | |
| Raton | X | |
| Red River | X | |
| Reserve | X | |
| Rio Rancho | X | |
| Roswell | X | |
| Roy | X | |
| Ruidoso | X | |
| San Jon | X | |
| San Ysidro | X | |
| Santa Fe | X | |
| Santa Rosa | X | |
| Silver City | X | |
| Socorro | X | |
| Springer | X | |
| Sunland Park | X | |

| INCORPORATED MUNICIPALITIES<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Taos | X | |
| Tatum | X | |
| Texico | X | |
| Truth or Consequences | X | |
| Tucumcari | X | |
| Tularosa | X | |
| Vaughn | X | |
| Virden | | X |
| Wagon Mound | X | |
| Willard | | X |

| COUNTIES<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Valencia | X | |
| Dona Ana | X | |

| SANITATION DISTRICTS / WATER & SANITATION DISTRICTS<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Alpine Village Sanitation District | X | |
| Anthony Sanitation District | X | |
| Bluewater Water & Sanitation District | | X |
| El Valle de los Ranchos Water & Sanitation District | X | |
| Lakeshore City Sanitation District | X | |
| Pena Blanca Water & Sanitation District | X | |

| SANITATION DISTRICTS / WATER & SANITATION DISTRICTS<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Ranchos de Placitas Sanitation District | X | |
| San Rafael Water & Sanitation District | X | |
| Thoreau Water & Sanitation District | X | |
| Twining Water & Sanitation District | X | |
| Williams Acres Water & Sanitation District | X | |
| Yah-ta-hey Water & Sanitation District | X | |

| STATE AGENCIES<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Corrections Dept. | X | |
| Dept. of Finance and Administration | X | |
| Health and Environment Dept. | X | |
| Natural Resources Dept. | X | |

| NATIVE AMERICAN TRIBAL ENTITIES<br>Agency Designated | Accepted | Rejected |
|---|---|---|
| Navajo Tribal Utility Authority (interim wastewater management agency) | X | |
| Pueblo of Pojoaque | X | |

**Strategy**

1) As economic development and growth continue in New Mexico, or as the need arises, additional designated management agencies for wastewater will be considered.

2) The WQCC will consider new designated management agencies upon presentation of a petition requesting such designation.

3) Designation of a Management Agency will occur only after appropriate public participation and presentation of relevant authorities by the applicant.

## II. Management Agencies for Nonpoint Sources of Pollution

The New Mexico Nonpoint Source Management Program identifies specific agencies and their programs for the implementation of the nonpoint source management and control program. Under the NPSMP, interagency agreements (e.g., MOUs) may be established to outline management responsibilities unique to each agency's area of responsibility and expertise.

### Strategy

1) Agencies or organizations participating through formal agreements under the NPSMP will be considered a designated management agency for purposes the WQMP.

**Work Element 6 – Implementation Measures**
(Revised: December 17, 2002)

**Requirements for Work Element 6**

Regulation 40 CFR 130.6(c)(6) requires:

> *[i]dentification of implementation measures necessary to carry out the plan, including financing, the time needed to carry out the plan, and the economic, social and environmental impact of carrying out the plan in accordance with section 208(b)(2)(E).*

**Background**

Schedules that specify when pollution control programs are expected to be implemented are useful in tracking the progress of control programs incorporated into the Water Quality Management Plan. Implementation schedules inform management agencies responsible for the programs and other interested or affected parties of when significant milestones leading to implementation are expected to occur.

According to federal regulations (40 CFR 130.6(c)), a plan element may be "referenced as part of the WQMP if contained in separate documents." The State of New Mexico has elected to utilize its Clean Water Act Continuing Planning Process as an "umbrella" planning document to describe implementation measures employed by the State to protect water quality and to carry out the plan. The CPP utilizes a "modular" approach to planning documents. In this approach, planning and protocol documents are incorporated by reference. This method facilitates updates and improvements of specific modules more readily than rewriting/reviewing an entire document.

Where appropriate or required, individual documents also contain additional implementation procedures specific to that document. For example, section 20.6.4.8 of the New Mexico *Water Quality Standards for Interstate and Intrastate Surface Waters*, [20.6.4 NMAC] defines the State's "Antidegradation Policy and Implementation Plan." In particular, the antidegradation plan addresses economic, social and environmental concerns pertinent to the policy. Another example is the State's Nonpoint Source Management Program that identifies implementation and financing of measures under that program.

Implementation schedules may also be affected by statutory or Court imposed orders. An example of a statutory schedule is CWA § 303(c) that requires States to review their water quality standards every three years. An example of a Court imposed schedule is the Consent decree and settlement agreement that resulted from *Forest Guardians and Southwest Environmental Center v. Carol Browner, Administrator, U. S. Environmental Protection Agency*

and the consequent MOU between the USEPA and the NMED for the development of TMDLs (see Work Element 1).

Measures for financing these programs may arise from a variety of sources including federal grants (e.g., CWA §§ 106, 201, and 319), state budgets authorized by the Legislature, state revolving funds, local governments, cost sharing with stakeholders (public and private) or other means as appropriate to the task.

**Strategy**

1) The New Mexico Continuing Planning Process is incorporated by reference.

2) Utilize the CPP as a reference guide to program implementation and scheduling.

3) Adhere to statutory, regulatory, and Court sanctioned schedules.

4) Utilize funding sources appropriate to the task.

5) To the greatest extent possible, a schedule should be posted on the NMED's Internet website detailing anticipated or tentative review schedules. Examples, include but are not limited to: triennial review of water quality standards and biennial review of the Clean Water Act section 303(d) list and the section 305(b) report to Congress.

**Work Element 7 – Dredge or Fill Program**
(Revised: December 17, 2002)

**Requirements for Work Element 7**

Regulation 40 CFR 130.6(c)(7) requires:

> *[i]dentification and development of programs for the control of dredge or fill material in accordance with section 208(b)(4)(B) of the Act.*

**Background**

The United States Department of the Army, Corps of Engineers is responsible for issuing permits for activities involving the discharge of dredge and fill materials as required pursuant to § 404 of the federal Clean Water Act. Where a State, such as New Mexico, is not delegated primacy for the issuance of permits (e.g., permits for dredged or fill material) pursuant to the CWA, the State is entitled pursuant to § 401 of the CWA to review discharges (and permits) to ensure the discharge will: 1) be compatible with appropriate state law; 2) protect water quality standards adopted in accordance with § 303 of the CWA; and 3) implement an effective water quality management plan. In such review, or certification, the State may: 1) approve the discharge without condition; 2) approve the discharge subject to conditions necessary to meet one of the three aforementioned criteria; 3) deny certification; or 4) waive certification. The New Mexico Water Quality Act (NMWQA) assigns the responsibility for certifying permits issued under the CWA to the New Mexico Environment Department (§74-6-4.E NMSA 1978). The NMWQA also specifies[16] conditions where a certification shall be denied.

The dredge or fill program is has also been addressed in the *New Mexico Nonpoint Source Management Program*[17].

**Strategy**

1) The *New Mexico Nonpoint Source Management Program* is hereby incorporated by reference.

2) The NM Environment Department will review dredge or fill permit actions for purposes of state certification. The Environment Department will assure through appropriate review and communication with the permitting authority that permit requirements and effluent limitations are: compatible with appropriate state law, protect water quality standards and implement the water quality management plan.

[16] § 74-6-5.E - NMSA 1978, 1993 Replacement Pamphlet
[17] July 1999 page 47.

**Work Element 8 – Basin Plans**
(Revised: December 17, 2002)

**Requirements for Work Element 8**

Regulation 40 CFR 130.6(c)(8) requires:

> *[i]dentification of any relationship to applicable basin plans developed in accordance with section 209 of the Act.*"

**Background**

Basin plans were initially developed by the State for water quality planning in the early and mid 1970's. In the 1980's the State elected to do its planning on a "state-wide" basis rather than a "basin-wide" basis. The USEPA approved New Mexico Continuing Planning Process, indicates *"the State has chosen to do its water quality management planning on a statewide basis and therefore has no areawide water quality management plans or basin water quality management plans*[18]*."*

Throughout the State, local government organizations and citizens are working to address "local" water issues relating to both quantity and quality. These organizations include voluntary watershed groups, soil and water conservation districts, county and municipal governments, and concerned citizens.

**Strategy**

1) Continue water quality management planning on a statewide basis.

2) Where appropriate, the state will work with, and encourage participation by local organizations and entities in the development and implementation of water quality management plan strategies in order to consider specific regional or watershed concerns.

[18] 1987 NM Continuing Planning Process, page 7 and 1998 NM Continuing Planning Process page 6.

**Work Element 9 – Ground water**
(Revised: December 17, 2002)

**Requirements for Work Element 9**

40 CFR 130.6(c)(9) specifies that:

> "…*States are not required to develop ground-water WQM plan elements beyond the requirements of section 208(b)(2)(k) of the Act.*" [Emphasis added.]

Section 208(b)(2) of the Act states:

> "*[a]ny plan prepared … shall include but not be limited to: … (k) a process to control the disposal of pollutants on land or in subsurface excavations within such area to protect ground and surface water quality.*"

**Background**

The WQCC has adopted comprehensive regulations [20.6.2 NMAC], including ground water quality standards and a discharge permitting program, for the protection of ground water quality under the authority of the New Mexico Water Quality Act (NMWQA). In accordance with the NMWQA [§ 74-6-4 NMSA 1978] the WQCC has delegated responsibility for administering its regulations regarding ground water protection to the New Mexico Environment Department and the New Mexico Oil Conservation Division (NMOCD) of the New Mexico Energy Minerals and Natural Resources Department[19]. The WQCC reviews and changes its regulations, as it deems appropriate.

In conjunction with the department-wide efforts to create/improve electronic databases, the NMED Ground Water Quality Bureau has developed a computerized database. The database addresses aspects of all of the ground water protection programs, including pollution prevention, assessment and abatement, Superfund oversight, and voluntary remediation.

The NMED database is designed to be GIS-compatible and to provide information on site characteristics, including contaminant types, legal entities, regulatory deadlines and issues, public notices, soil and ground water analytical data, well construction details, generalized lithology, and other related information. The database can be used to track regulatory timelines, providing notices of due dates to NMED staff for site-related correspondence and activities. The database may be used by the NMED to respond to public or regulatory-related inquiry, and for supporting production of the 305(b) Report to Congress.

[19] *Delegation of Responsibilities to Environmental Improvement Division and Oil Conservation Division* July 21, 1989.

The NMOCD has developed similar database functions to assist in the implementation of the ground water quality protection regulations.

**Strategy**

1) The WQCC will update the *Ground and Surface Water Protection Regulations* [20 NMAC 6.2] as necessary to meet arising needs.

2) The NMED and the NMOCD will continue to administer the state regulations for ground water protection in accordance with the WQCC's delegation of responsibilities.

**Work Element 10 – Determination of Compliance with Water Quality Standards for the Protection of Human Health Criteria**

(Revised: December 17, 2002)

**Requirements for Work Element 10**

This Work Element is not required by federal regulation.

**Background**

In March 2002, the NMED SWQB proposed revisions to the *Water Quality Standards for Interstate and Intrastate Surface Waters* (20.6.4 NMAC) to include human health standards. The WQCC at their regularly scheduled open meeting in May 2002 deliberated the March hearing record. Upon deliberation, the WQCC unanimously voted to substitute language in subsection D of 20.6.4.11 to read as follows:

> ***Compliance with water quality standards for the protection of human health shall be determined from the analytical results of representative grab samples, as defined in the Water Quality Management Plan. Human health standards shall not be exceeded.***

The procedures and methods used in the scientific studies necessary to make compliance determinations are found in several documents developed by the SWQB. These documents include the New Mexico Water Quality Standards for Interstate and Intrastate Surface Waters [20.6.4 NMAC], adopted by the WQCC, the State of New Mexico Continuing Planning Process document, reviewed and approved by the WQCC, and the SWQB Quality Assurance Project Plan (QAPP), reviewed and approved by USEPA on an annual basis. The QAPP specifically addresses both laboratory and field procedures, including data interpretation approaches and field sampling techniques. These field procedures are specified in documents known as SWQB protocols, which are incorporated as appendices to the QAPP. The recent action by the WQCC concerning human health priority toxic pollutants relies on grab sample techniques to determine standards compliance. Accordingly, specification of this technique is appropriate.

The USEPA guidance document entitled "NPDES Storm Water Sampling Guidance Document" (EPA 833-B-92-001), July 1992 defines a grab sample on page 37 as "*A discrete, individual sample taken within a short period of time (usually less than 15 minutes). Analysis of grab samples characterizes the quality of a storm water discharge at a given time of the discharge.*" This definition is operationally sufficient for both perennial and ephemeral waters. In order to address the possibility of sampling or analytical error, it is the policy of the SWQB that a minimum of two such samples shall be used to determine accuracy and repeatability of sampling and analytical techniques. A grab sample shall be considered a representative grab sample when the analytical results of that sample have been confirmed as unbiased and reproducible by comparison to the analytical results of a second grab sample. Procedures used for the evaluation

of quality assurance and quality control are found in the QAPP Section 13 Quality Control Requirements and other sections. The analytical results of that single representative sample shall be used for the determination of compliance with applicable human health criteria.

**Strategy**

1) Sampling for determination of compliance with water quality standards human health criteria shall be accomplished as follows:

   a) **Perennial Waters**: A minimum of three individual grab samples, separated in time by no less than 15 minutes each, shall be taken during the same sampling event from the same location. For the purpose of determining noncompliance, the analytical results of 2 or more of these samples must be greater than the applicable human health criteria. Results of all grab samples shall be recorded and reported.

   b) **Ephemeral Waters**: A minimum of three individual grab samples, separated in time by no less than 15 minutes each, shall be taken during the same ephemeral flow event from the same location. For the purpose of determining noncompliance, the analytical results of 2 or more of these samples must be greater than the applicable human health criteria. Results of all grab samples shall be recorded and reported.

2) Sampling and analysis shall be in accordance with the SWQB's current QAPP.

**Work Element 11 – Public Participation**

(Adopted October 1978)

**Requirements for Work Element 11**

This Work Element is not required by federal regulation.

## A. OVERVIEW

Public participation has been an area of considerable emphasis in the Section 208 planning program over the previous 2 years. What is meant by the term "public participation"? It goes beyond public relations; it encompasses education, the dispensing of information, and more importantly providing for public involvement and feedback regarding the water quality plan.

The Section 208 public participation program was outlined in a work plan first developed by EID in December, 1976 and subsequently revised in June, 1977. This document, which was distributed to many individuals, groups and agencies interested in the Section 208 program, covers many elements of pubic participation, including philosophy, activities, budget, publicity and evaluation. The work plan has served as a guide for the program and as a yardstick for measuring progress. Various portions of the public participation program were carried out by EID (both central office and district staff), Forestry, SWCD and for the Albuquerque Metro Area, the Middle Rio Grande COG.

## B. PROGRAM COMPONENTS

The public participation program has consisted of 2 phases: an information-education period covering approximately 1 1/2 years and an involvement-feedback period of about 6 months. These phases coincide roughly with the data generation and plan development periods comprising the Section 208 program.

Four advisory bodies participated actively in the Section 208 program:

The Statewide Policy Advisory Commission constitutes one of the major means through which public input into the development of the plan was obtained. The Policy Advisory Committee has met approximately once every 2 months since its formation in February, 1977. All members were appointed by the Governor to serve until November 1, 1978. This body was organized pursuant to 40 CFR 130.16(c), Intergovernmental Cooperation and Coordination. Eleven individuals represent USDA, USDI, EID, the League of Women voters, the New Mexico Mining Association, the Sierra Club, agricultural interest, consulting engineers, the New Mexico Municipal League, counties and the New Mexico Association of Regional Councils. The Committee advises EID.

The Policy Advisory Committee has reviewed all significant Section 208 program reports or "outputs" produced by EID staff and contractors. A number of recommendations to staff arose out of the review process. These are contained in Policy Advisory Committee meeting minutes and are available in the files. The Forestry Technical Advisory Task Force, representing state and federal agencies, landowners and private industry assisted Forestry in writing the silvicultural portions of Work Element 4 and in obtaining public input.

The SWCD Technical Advisory Committee consisted of representatives similar to those serving on the Forestry Task Force. This group work with SWCD in developing its sediment study framework and in evaluating progress and results.

The Albuquerque Metro Area Policy Advisory Committee (Middle Rio Grande COG Board of Directors) assisted in evaluating plan elements concerned with the Albuquerque Metro area. This committee primarily represents local government entities and special purpose units of government in the state's largest and most rapidly urbanizing metropolitan area. Descriptions of the major public participation activities and their significance follow. Some of these activities were confined to 1 of the 2 phases (information-education and involvement-feedback) while others occurred throughout the program.

Mailing List Development: Early in the program and effort was begun to develop a statewide mailing list for persons and groups interested in the Section 208 program. Within the first year, the initial list of 200 games grew to 900. By June, 1978 over 1200 addresses were receiving EID newsletters and flyers concerning the Section 208 program.

Newsletters: Since mid-1976, 9 issues of the EID water quality planning newsletter, Focus on Clean Water (formerly Section 208 News) have been published and mailed to all names on the mailing list and distributed to other individuals at meetings and through EID district staff. These newsletters, which contain articles on program highlights, upcoming meetings, water-related topics of interest and legislative matters, have constituted the topics of interest and legislative matters, have constituted the program's major information dissemination mechanism.

A second newsletter, Water Quality Management for the Middle Rio Grande Area, is published on a quarterly basis by the Middle Rio Grande COG. It focuses on water quality planning issues in the Albuquerque Metro area as well as statewide matters of interest to the people Albuquerque.

Presentations: Public awareness of the Section 208 program, which was fostered in order to stimulate active public participation, increased in part because of frequent presentations and round-table discussions with varied groups throughout the state. Audiences included the Sierra Club, Wildlife Federation, Cattlegrower's' Association, Farm and Livestock Bureau, Lions and Optimists Clubs, Resource Conservation and Development Councils, League of Women Voters, student, and

many federal, state and local government groups. EID, Forestry, SWCD and Middle Rio Grande COG all made frequent use of slide-tape programs developed especially for these presentations. EID central and district office staffs, for example, made over 50 presentations.

Public Meetings: Widely advertised public meetings were held at different locations around the state, including Santa Fe, Albuquerque, Roswell, Farmington and Las Cruces. These meetings were aimed largely at bringing the public up to date on the Section 208 program status and at soliciting citizen and agency concerns regarding water quality problems statewide.

Mini-libraries: In New Mexico it is often necessary for people to travel great distances to visit public offices or facilities. To minimize the time and effort required for interested individuals to study Section 208 documents and reports, 35 mini-libraries were established at public libraries, college and university libraries and government offices throughout the state. Mini-collections were updated twice each year.

Traveling Exhibits. Early in the program 3 displays of water quality-related color photographs, maps, and ideas for citizen action were assembled. EID district staffs brought the exhibits to many locations where citizens could study them and learn more about the Section 208 program as it applied to their part of the state. Display sites included city hall lobbies, post offices, shopping malls and regional and county fairs. One of the displays was awarded 2nd prize at the 1977 Sierra County Fair. Pre-stamped and addressed postcards on each display provided EID with feedback from individuals viewing the exhibits.

Photography Contest: To enhance citizen interest in water quality, as statewide water pollution photography contest was sponsored by EID. Excellent publicity was provided by radio and television stations and newspapers. Entry judging was conducted by EID staff, professional photographers and medial personalities. Prizes were awarded to entrants in 5 regions.

Children's Booklets: A 20-page illustrated booklet, especially for young people in grades 4-7, was produced under the public participation program. The booklet explains some basic concepts related to water and water pollution and describes the problems of greatest concern in New Mexico, along with steps being taken by the state to insure clean water for the future. Ten thousand booklets have been distributed to classrooms throughout the state. A 4-page teacher's guide supplements the booklet's contents and offers ideas for additional water quality study activities and field trips.

League of Women Voters Activities: The New Mexico League of Women Voters received a water quality public education grant from the National League of Women Voters Education Fund early in 1978. EID worked closely with the League in developing and conducting a program which would supplement the Section 208

public participation program. The highlights of the League activities were 3 citizens' bus trips, in which interested individuals were given the opportunity to visit and tour mines, wastewater treatment plants and other sites of interest from a water quality standpoint. In addition, the League provided publicity for EID public meetings and workshops.

Workshops. Following the development of draft Section 208 plan strategies, 17 workshops were conducted across the state for the purpose of obtaining feedback concerning the recommendations from interested individuals, groups and agencies. Each workshop focused on one topic, such as irrigated agriculture, forestry or rural sewage. The workshops were advertised through news release, TV and radio spots and a flyer which was sent to all individuals on the mailing list. Workshops are listed in the Appendix.

## C. PUBLIC PARTICIPATION AND PLAN DEVELOPMENT

The accompanying flow chart documents the plan development process chronologically from the receipt of the grant for Section 208 planning to the forwarding of the final plan to USEPA. It is included here to illustrate the role of public participation in plan development. Public participation is significant at several key points. During the preparation of plan outputs, input from the public at large is solicited, to assist staff in determining priorities. Additionally, the four advisory bodies have an important evaluative role to play at this time. After the plan is assembled, it is reviewed by advisory bodies and government entities, mainly through mailouts, workshops and hearings.

## D. SUMMARY

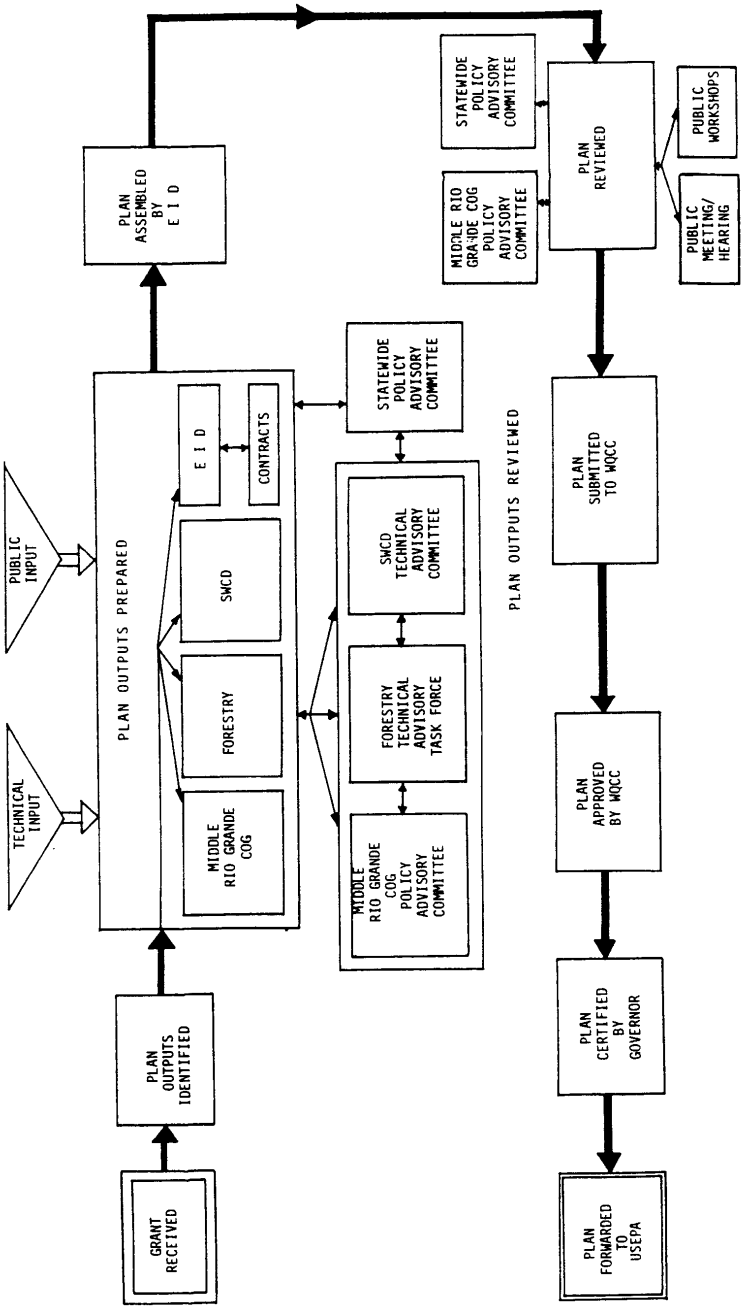
Over the past 2 years, many activities were conducted for the purpose of raising the public's level of awareness regarding water quality issues. Other portions of the program were designed specifically to solicit public inputs into the Section 208 plan.

How well did these activities work at informing and involving the public? Progress has clearly been made in stirring the interest of citizens, groups and organizations that have a stake in clean water. The many inquiries, invitations to speak, requests for information, newsletters, documents and speakers which have been received illustrate this concern. New Mexico's size and the distances separating its town, however, have presented some obstacles. It has been difficult for the planners to travel to the state's people and water quality problem areas. The involvement of EID district staffs in Section 208 public participations lessened this problem to a degree, as did the selection of advisory committee representatives from areas other than Santa Fe and Albuquerque.

Advisory committee activities have been time-consuming for both the Section 208 planning staff and members. Inputs of these groups into the plan's development have been valuable, however.

Encouraging meaningful public participation in water quality programs is an ongoing effort and part of the state's continuing planning process. This planning phase is concluding, but it is expected that public participation will continue, expand and improve.

FIGURE (11)-1 Section 208 P... Development Process-May, 1976 to November, 1978



## Appendix – USEPA Review and Public Participation 2001/2002 WQMP Update

### Review Process

Public review and participation for the 2001/2002 update to the WQMP was performed under the "Process for Updating and Maintaining the Statewide Water Quality Management Plan" section of the 1998 CPP.

Preliminary correspondence with the USEPA regarding WQMP update requirements and strategies began April 9, 2001, by letter outlining a comprehensive approach to the project. On September 28, 2001, a preliminary draft was electronically transmitted to EPA requesting comment. On October 29, 2001, USEPA responded to the Surface Water Quality Bureau with their comments. On December 5, 2001, and December 20, 2001, the Surface Water Quality Bureau responded to USEPA's comments with revised preliminary drafts. On December 21, 2001, the USEPA provided the Surface Water Quality Bureau with a letter of Technical Acceptance of the preliminary draft. This review and Technical Acceptance indicated that, if adopted as proposed, the EPA would be able to approve the December 20, 2001 draft of the proposed revisions to the WQMP as required by the Code of Federal Regulations. The December 20, 2001 version then became the basis of public comment.

Public review was initiated by letter to the WQCC, a news release, electronic mailing to interested parties, U.S. Postal Service mailing to the WQCC mailing list, and public notice issued January 18, 2002 published in the Albuquerque Journal (January 18, 2002), The Santa Fe New Mexican (January 21, 2002), the Farmington Daily Times (January 18, 2002), the *Las Cruces Sun News* (January 18, 2002), and the Roswell Daily Record (January 18, 2002). The draft WQMP and public notice was also posted on the NMED's web page. A sixty-day comment period (double the 30-day minimum specified in the CPP) was provided. During the 60-day comment period the Surface Water Quality Bureau held four public meetings at various locations throughout the State. Public meetings were held in Las Cruces (February 4, 2001 – 7 attendees), Roswell, (February 5, 2001 – 3 attendees), Santa Fe (February 6, 2001 – 13 attendees) and Farmington (February 7, 2001 – 16 attendees). During the comment period the SWQB also received (and fulfilled) a request to present the proposed revisions to the winter meeting of the Western Coalition of Arid States (WESTCAS). WESTCAS meeting attendees included representatives of western state's and USEPA water quality program officials and managers. WESTCAS was particularly interested in SWQB's approach to the plan by presenting a maximum amount of information through the electronic format. The Surface Water Quality Bureau prepared and mailed to all meeting participants a summary document of oral comments and discussion that occurred during the public meetings. Written comments were received from several citizens and organizations. The draft WQMP and the public participation process was presented and discussed at the April WQCC regularly scheduled open meeting.

### Response to Comments Received January 18 through March 19, 2002

The SWQB greatly appreciates the effort and thought the commenters provided.

**General Issues**

Where similar comments from separate commenters occurred they have been compiled into a single general issue for response.

**General Issue # 1**

The introduction to the document should be updated, expanded, and retained to better inform the reader as to the purpose of the document. The introduction should be understandable to the public and readers not already familiar with the document.

**Response to General Issue # 1**

The Introduction was rewritten to better explain the purpose. A new "Preface" section was also added to describe the WQMP update process and goals.

**General Issue #2**

There were numerous widely different comments on the overall quality and approach to this update of the WQMP. One commenter expressed dissatisfaction that the document was "not intelligible to a member of the public on first encounter, … the documents seem focused on 'rote compliance' rather than informing and involving the public, … looking at the other states I would rank our efforts dead last … I suggest that an examination of the whole documentation structure needs to be undertaken…." [Mechels]. In contrast other commenters were laudatory of the effort stating the approach was "… exceptionally helpful" [Dairy Producers], "… we support the approach that the Environment Department is taking to simplifying the … Plan" [San Juan Coal Company] "… it is refreshing to me that your agency has chosen to show respect for the people you serve by making the process and information physically and intellectually accessible [and] … done a good job refining the WQMP" [Oldham] and that "… this innovative approach is likely to serve as a model for other states. [LANL]."

Many commenters expressed appreciation and support for the public meetings held throughout the state.

**Response to General Issue # 2**

Obviously no document is all things to all people. The SWQB greatly appreciates the effort and thoughts of all those persons who attended the public meetings and provided verbal participation as well as those who provided written comments. SWQB has reviewed each comment and did make some changes to help the reader, particularly the "lay person" such as adding a preface and expanding the introduction. It is helpful to understand the broad spectrum of the users of this document for this and future endeavors.

**General Issue #3**

The CPP and the WQMP both need revision and these revisions should be done concurrently.

**Response to General Issue #3**

To revise both documents concurrently would be unwieldy and confusing to many who wish to participate. The goals of the current effort, primarily updating a compilation version of the Water Quality Management Plan, have been added to the preface of the document. The SWQB encourages commenters to stay involved as progress is made toward building on the new foundation of the WQMP.

**General Issue # 4**

Two commenters (Forest Guardians and San Juan Water Commission) addressed concern for the WQCC current statewide approach to planning as opposed to basin planning.

**Response to General Issue # 4**

As indicated in the current CPP the State has chosen to do its planning on a statewide basis. As stated in the new preface section of the WQMP the goals of this effort do not encompass or address such a large revision to existing policy. This is an issue that should be addressed in its own separate forum. This recompilation / update of the WQMP should provide a clean foundation for initiating future discussions as suggested by these commenters.

**Specific Issues**

(Note: issue numbers below do not correspond to numbers assigned by the commenter in their correspondence).

The following are responses to specific issues in written comments not addressed in general responses. Specific comments are briefly summarized below. The full context of the comment is available through the electronically attached copy of each commenter's submittal.

**Concerned Citizens for Nuclear Safety (CCNS) Issues**

**Concerned Citizens for Nuclear Safety Issue # 1**

The Public Participation work element should not be deleted. Public participation is an essential component of a management plan and informing the public of government actions and decision-making. Eliminating the public participation element would violate 40 CFR 130.6(c)(9)(v).

**Response to CCNS Issue # 1**

SWQB recognizes the value of public participation. SWQB encourages and is actively seeking new ways to improve accessibility and public participation. In this light, SWQB sponsored four public meetings throughout the State to consider the WQMP revisions. The intent of this

document utilizing an electronic format is to facilitate public access to large volumes of information through a single document. SWQB has a full time public outreach coordinator who is in the process of completing a draft public participation protocol for all the Bureau's activities. This protocol is undergoing internal and USEPA review. SWQB will seek public review of the protocol in the near future.

The public participation work element ("old" Work Element 11) was last revised in 1978. Public Participation and outreach is a key aspect of all of the subprograms under the Clean Water Act and the Water Quality Act (e.g., water quality standards development, TMDL development, regulation review etc.). Public Participation is described in individual programmatic plans (e.g., the Nonpoint Source Management Plan) and the Continuing Planning Process document. Public review of this WQMP proposal was carried out in accordance with requirements specified in the CPP. The emphasis of old W.E. 11 as adopted in 1978 focused on CWA §208 planning and how public input was obtained in reaching the 1978 plan. Some references to federal regulations within the old W.E. 11 are now obsolete. Finally procedures for public participation and education in 1978 could not have envisioned and therefore do not address the current power of the Internet and electronic documents as a means of outreach. In the future, planning efforts will continue to directly incorporate public participation procedures in documents such as the CPP, and may be incorporated as a modern work element in future revisions/updates to the WQMP.

SWQB disagrees that eliminating the public participation element at this time would violate 40 CFR 130.6(c)(9)(v). 40 CFR 130.6(c)(9) is the requirement for a Ground Water work element. Paragraph 9 states:

> *...[i]f a State chooses to develop a ground-water quality plan element, it should describe the essentials of a State program and should include, but is not limited to: ...(v) [p]rocedures for program management and administration including ... public participation....* [Emphasis added.]

EPA's use of the term "should" indicates inclusion is not mandatory. However, the Work Element 9 references the WQCC Regulations for Ground and Surface Water Protection found at 20.6.2 NMAC. Those regulations (e.g., 20.6.2.3108 NMAC – Public Notice and Participation and 20.6.2.3110 NMAC – Public Hearing Participation) spell out public participation requirements for the ground water protection program. Finally, SWQB consulted with the USEPA regarding the proposed revisions to the WQMP prior to public notice to ascertain if the revisions met the requirement of the Clean Water Act and the Code of Federal Regulations. The USEPA responded that the document as proposed was "technically acceptable."

**C. Mechels Issues**

**Mechels Issue #1**

NMED must undertake a major upgrade of its web site.

**Response to Mechels Issue #1**

While not directly related to the WQMP, NMED agrees that the website should be a major tool in communicating with the public and the regulated community and continues to work toward improving and expanding its website. Internal work groups have been formed and SWQB is participating in that effort.

**E. Oldham Issues**

**E. Oldham Issue # 1**

The plan is reactive and not proactive. I expect the limitations lie in the enabling legislation, and as such are beyond your authority … there is a legal and regulatory disconnect between water rights, water supply, and water quality.

**Response to E. Oldham Issue #1**

The SWQB appreciates the time and effort that you have put into local water issues and would encourage you to continue to voice your concerns.

**Forest Guardian Issues**

**Forest Guardians Issue #1**

In general, we [Forest Guardians] find the WQMP draft to be inadequate due mainly to it's [sic] reference to numerous other documents (the Continuing Planning Process in particular) that are currently being revised and/or are not yet approved by EPA. In referring to the CPP, the WQMP places most of it's implementation measures and authority in that document, one which is being revised and is as yet unapproved by the EPA. The Clean Water Act explicitly states there must be *adequate authority and implementation in a WQMP*. §303(e)(3)(E and F), 33 U.S.C.A. §1313 (emphasis added). By deferring this implementation and authority to other documents like the CPP, NMED is not following this mandate of the CWA.

**Response to Forest Guardians Issue # 1**

The SWQB is currently involved in drafting revisions to the CPP. However, the 1998 CPP that is referenced throughout the draft WQMP has been approved by the USEPA. SWQB consulted with the USEPA regarding the proposed revisions to the WQMP prior to public notice to ascertain if the revisions met the requirement of the Clean Water Act and the Code of Federal Regulations. The USEPA responded that the document as proposed was "technically acceptable."

**Forest Guardians Issue #2**

Forest Guardians provided extensive comment on the voluntary nature of implementing Best Management Practices in TMDLs and their opinion that the WQMP should establish more clearly what regulatory mechanisms would be used to ensure that appropriate control actions are taken.

**Response to Forest Guardians Issue # 2**

The many TMDLs listed in the compilation revision of Work Element 1 have all been previously reviewed by the public, adopted by the WQCC and approved by the USEPA. This compilation revision did not open the TMDLs for additional debate or approval. The purpose of this revision to the WQMP was to compile existing TMDLs and relocate those TMDLs from one Work Element to another. Forest Guardians is encouraged as are other members of the public to participate in the development and implementation of TMDLs in the forum provided as each TMDL is developed, reviewed, and approved.

Individual TMDL plans include implementation measures specific to that plan. As stated in the "background" section of the Work Element 1, current statutory and regulatory frameworks provide for implementation through the NPDES permit program for point source discharges and the CWA section 319 Nonpoint Source Management program for other sources. To help clarify this SWQB has added Strategy #3 to the Work Element to address this approach.

Presently, there is no requirement under the federal Clean Water Act for reasonable assurances for implementation of nonpoint source TMDLs. As stated in existing guidance (Guidance for Water Quality-Based Decisions: The TMDL Process, EPA 440/4-91-001, April 1991) implementation of nonpoint source TMDLs is through voluntary programs, such as section 319 of the Clean Water Act. According to the proposed regulations for TMDLs (40 CFR 130.2[p]), site-specific or watershed-specific voluntary actions are mechanisms that may provide reasonable assurances for nonpoint sources. The SWQB has implemented TMDLs statewide through a strong Watershed Protection Program. This program will continue to provide for the implementation of nonpoint source TMDLs.

Pursuant to Section 303(e)(1) of the Clean Water Act (CWA), the Surface Water Quality Bureau (SWQB) has established appropriate monitoring methods to evaluate the effectiveness of controls or Best Management Practice (BMP) activities. In order to optimize the efficiency of this monitoring effort, the SWQB has adopted a rotating basin monitoring strategy. This strategy is based on a 5-7 year return interval, and provides improved coordination and monitoring of BMP effectiveness.

Implementation plans are included in every TMDL in New Mexico. As stated in the TMDL document, this is a general implementation plan for activities to be established in the watershed. The SWQB will further develop the details of the plan with the help and cooperation of the stakeholders and other interested parties in the watershed. Detailed watershed management plans that include specific BMPs should be developed by and for watershed stakeholders. In this watershed, public awareness and involvement will be crucial to the successful implementation of

this plan and improved water quality. Staff from the SWQB will work with stakeholders to provide the guidance in developing the Watershed Restoration Action Strategy (WRAS). The WRAS is a written plan intended to provide a long-range vision for various activities and management of resources in a watershed. It includes opportunities for private landowners and public agencies to reduce and prevent impacts to water quality. This long-range strategy will become instrumental in coordination, reducing, and preventing further water quality impacts in the watershed. SWQB staff assists with technical assistance such as the selection and application of BMPs needed to meet WRAS goals. The watershed management plans would include any specific BMPs for activities, such as grazing or road runoff and maintenance that are identified as contributing to the water quality impairment. It is not the intention of the SWQB to provide an all inclusive watershed management plan in the TMDL documents. In order to obtain reasonable assurances for implementation in watersheds with multiple landowners including Federal, State, and private land, the SWQB has established Memoranda of Understanding (MOUs) with various Federal and State agencies. These MOUs provide for co-ordination and consistency in dealing with Nonpoint source issues. Milestones are also used in the implementation plans in the TMDL documents to determine if BMPs are implemented and standards attained.

**Forest Guardians Issue #3**

Forest Guardians in an extensive comment assert that the WQMP must include implementation procedures for consultation with the U.S. Fish and Wildlife Service to comply with the Endangered Species Act.

**Response to Forest Guardians Issue # 3**

The Code of Federal Regulations (40 CFR 130.6) specifies the nine required elements of a WQMP [see revised Introduction to the WQMP]. SWQB consulted with the USEPA regarding the proposed revisions to the WQMP prior to public notice to ascertain if the revisions met the requirement of the Clean Water Act and the Code of Federal Regulations. The USEPA responded that the document as proposed was "technically acceptable."

**LANL Issues**

**Los Alamos National Laboratory (LANL) Issue #1**

LANL urges NMED and the WQCC to archive records with the State Records Center so there is public access to these records.

**Response to LANL Issue # 1**

SWQB agrees archiving WQCC records is important. While not directly responsible for archiving WQCC documents, SWQB is aware that many WQCC documents are already in archive at the State Records Center.

As shown in the TMDL tables of Work Element 1, SWQB has begun to use the capabilities of electronic documents by incorporating hyperlinks to relevant documents such as WQCC minutes and correspondence from EPA approving the TMDLs to enhance the public record.

**Los Alamos National Laboratory Issue #2**

LANL provided extensive comment on the overall planning process and useful comparisons on the intent and requirement of the WQMP and the CPP.

**Response to LANL Issue # 2**

SWQB appreciates the time and effort of LANL in providing this useful information and would encourage LANL to continue to participate in future water quality planning initiatives. As stated in the new Preface SWQB envisions this compilation and update of the WQMP to be the precursor to building a stronger WQMP in future actions. The information will also be useful in future review of the CPP.

**Los Alamos National Laboratory Issue #3**

LANL commented that this plan "does not identify priority water quality problems or issues."

**Response to LANL Issue #3**

SWQB partially agrees with LANL and, as in the previous comment, believes that this might be an area to explore in future reviews in that priorities might be more explicit. However, by default, inclusion of certain issues in the WQMP is an expression of priority. For example TMDLs in Work Element 1 are developed and adopted in response to problems noted in watersheds via the CWA §303(d) list. Another example of how the WQMP is working to prioritize is through the incorporation by reference of the *New Mexico Nonpoint Source Management Program*. The Nonpoint Source Management Program details how nonpoint source project will be prioritized.

**Los Alamos National Laboratory Issue # 4**

LANL suggested insertion in the introduction of a matrix that indicates the disposition of the all the old work elements / work element strategies.

**Response to LANL Issue #4**

SWQB summarized the disposition of the various affected work elements in the PowerPoint® presentation made to the public in February 2002 and the similar but slightly different PowerPoint® presentation made to the WQCC in April 2002. The SWQB had prepared a "proposed action table" of notes in the process of preparing this revision that addresses LANL's issue. The Table would not be appropriate in the introduction as suggested by LANL because of its size and format. However SWQB includes the notes or Proposed Action Table in this response to comments that is appended to the WQMP and should therefore serve those interested in the question.

**Los Alamos National Laboratory Issue # 5**

The list of TMDLs could be adequately presented in a table that would not occupy as much space.

**Response to Issue # 5**

SWQB concurs and has reformatted the information into a table format.

**Los Alamos National Laboratory Issue #6**

Work Element 1 should include a description of the prioritized TMDL activities and issues that will be the focus of the coming years work.

**Response to Los Alamos National Laboratory #6**

Strategy 1 for Work Element 1 addresses this issue. At the time the draft WQMP was prepared an electronic copy of the Forest Guardians/USEPA Settlement Agreement was not available thus no hyperlink was provided. An electronic copy of the Settlement Agreement has been created and a hyperlink created. Access to a copy of the Settlement Agreement will provide additional information.

**Los Alamos National Laboratory Issue # 7**

Tables 1-1, 1-2, and 1-3 are point source load allocations that were established by TMDLs prior to 1999. It seems these tables should be in Work Element 2.

**Response to Los Alamos National Laboratory Issue #7**

Tables 1-1, 1-2, and 1-3 are from TMDLs and therefore SWQB believes inclusion in Work Element 1 is appropriate. These tables are included separately because due to their age they are not available electronically *in toto*. The intent of Work Element 2 is to define a process for NPDES effluent limitations rather than a list. USEPA has reviewed this approach and has provided a letter that this approach is technically acceptable.

**Los Alamos National Laboratory Issue #8**

A list of NPDES permits, with the location of discharge and status should be provided in this plan or hyper linked to the plan. A list of NPDES permits is available on the NMED website.

**Response to Los Alamos National Laboratory Issue #8**

The SWQB maintains a list of NPDES permits on its website for informational purposes. A reference to the website address has been added to the "Background" section of Work Element 2.

**Los Alamos National Laboratory Issue #9**

In Work Element 2, strategies 2, 3, and 4 are EPA responsibilities and it is not clear why they are part of the strategy for New Mexico.

**Response to Los Alamos National Laboratory Issue #9**

As stated in the Background of Work Element 2, the USEPA currently has the responsibility to issue NPDES permits. The language utilized in strategies 2, 3, & 4 does not refer directly to EPA but refers appropriately to the "NPDES permitting authority" whether that is the USEPA or the State. The strategies are also informative to the public.

**Los Alamos National Laboratory Issue # 10**

Work Element 2 should include a description of prioritized NPDES activities and issues that will be the focus of the coming years as required by 40 CFR 130.6(b).

**Response to Los Alamos National Laboratory Issue # 10**

As noted in the Work Element the State is not delegated primacy for the NPDES permit program. NPDES permitting priorities are set by permitting agency. The State's priorities are expressed in strategies 5 & 6 and the background information that describes the importance of those activities (e.g., review and certification of proposed NPDES permits to assure all permits are compatible with appropriate state law, protect state adopted water quality standards and implement the state adopted water quality management plan). USEPA has reviewed this approach and has provided a letter that this approach is technically acceptable.

**Los Alamos National Laboratory Issue # 11**

In Work Element 3 the referenced documents should be hyperlinked.

**Response to Los Alamos National Laboratory Issue # 11**

Additional hyperlinks have been added.

**Los Alamos National Laboratory Issue # 12**

Work Element 3 should include a description of the prioritized waste treatment activities and issues that will be the focus of the coming years as required in 40 CFR 130.6(b).

**Response to Los Alamos National Laboratory Issue # 12**

An additional strategy (#6) has been added to Work Element 3 to clarify that New Mexico's priorities will be guided by the documents referenced in the Work Element.

**Los Alamos National Laboratory Issue # 13**

The description of Work Element 4 should be expanded to include the use of BMPs controlling nonpoint sources and funding for nonpoint source pollution control activities. The expanded description should be comparable to Work Elements 1 and 2.

**Response to Los Alamos National Laboratory Issue # 13**

The Nonpoint Source control program including the use of BMPs and funding descriptions is fully described by the *New Mexico Nonpoint Source Management Program* document that is incorporated into the WQMP by reference as indicated in Strategy 1 and the list of documents incorporated by reference.

**Los Alamos National Laboratory Issue # 14**

Work Element 4 should include a schedule for revision of the Nonpoint Source Management Plan and should also include the prioritized nonpoint source management activities for the coming years as required in 40 CFR 130.6(b).

**Response to Los Alamos National Laboratory Issue # 14**

The Clean Water Act does not specify a particular timeframe for revision of the Nonpoint Source Management Plan adopted in accordance with Section 319 of the Act. Therefore, EPA indicates the Plan only needs to be revised as needed. Another strategy has been added to indicate the Plan will be revised as needed

The method of prioritization of nonpoint source activities is contained in the Nonpoint Source Management Plan that is incorporated by reference. For example, the Plan provides for the prioritization of projects, solicited through an annual Request For Proposal process. According

to the Plan, projects in impaired waterbodies identified through the CWA §303(d) list will receive a higher priority than proposed project in non-impaired waters. USEPA has reviewed this approach and has provided a letter that this approach is technically acceptable.

**Los Alamos National Laboratory Issue # 15**

LANL suggested an editorial change of removing the "rejected column" of Designated Management Agencies in Work Element 5.

**Response to Los Alamos National Laboratory Issue # 15**

SWQB appreciates the comment but in this effort the SWQB has with only minor changes (i.e., additions since the table was last printed and word processing changes) transplanted the tables of earlier versions of the WQMP into this version.

**Los Alamos National Laboratory Issue # 16**

In Work Element 6 the Background section should include a schedule.

**Response to LANL Issue # 16**

The Work Element does not require schedules; explanations of what kinds of implementation measures are identified and strategies for schedules are appropriate.

**Los Alamos National Laboratory Issue # 17**

In Work Element 6, an explicit listing of funding programs that are used for water pollution control activities should be provided.

**Response to Los Alamos National Laboratory Issue # 17**

The last paragraph of the Background section of this Work Element provides such a listing.

**Los Alamos National Laboratory Issue # 18**

In Work Element 9, LANL suggests the discussion is out of place within the context of the work element and that a concise overview of the regulations would be more consistent.

**Response to Los Alamos National Laboratory Issue # 18**

A concise overview of the regulations is presented in the first paragraph of the background and a link is provided to the regulations that "speak for themselves." The discussion on databases at

the Bureau and Department levels is appropriate. Database management and computer technology (e.g., geographic information systems) in a modern and efficient workplace are critical tools in the process to control the disposal of pollutants.

**San Juan Coal Company**

**San Juan Coal Company Issue # 1**

San Juan Coal strongly disagrees with the inconsistent approach proposed for the TMDL element, that [they] understand has been pushed by EPA. The planning document is not the place for a library of every TMDL. San Juan supports the NMED's approach taken with other elements, i.e., a summary of how the element fits into the plan and hot links to additional information. That approach will work equally well with the TMDL elements. The Water Quality Plan can include a hot link to the TMDL program library … recreating that library in the WQMP is inefficient and redundant use of our state staff. The EPA's proposed approach is also inconsistent with the Federal Paperwork Reduction Act because it not only forces a duplication of effort, but creates duplicate "electronic paper" that occupies computer space.

**Response to San Juan Coal Company Issue #1**

SWQB feels the detailed listing of TMDLs in the revised table is useful to the public and the agency. The TMDL tables with their hot links serve as a compilation and directory to very important documents with high public interest. The electronic document approach adopted by SWQB streamlines the WQMP dramatically. SWQB cannot comment on EPA's approach to these documents but feels that the approach the SWQB has adopted is useful to the Commission and the public.

**San Juan Water Commission Issues**

All of San Juan Water Commission's issues were addressed under the general issues above.

**Supplement**

On August 13, 2002, during the WQCC's regularly scheduled monthly meeting, the Environment Department SWQB presented the WQCC the above response to public comments including revisions based upon the public comments for Work Elements 1 through 9. The SWQB also proposed a new Work Element 10. Work Element 10, titled "Determination of Compliance with Water Quality Standards for the Protection of Human Health Criteria" was proposed in response to the WQCC's April 2002, decision to adopt new human health criteria in the Water Quality Standards for Interstate and Intrastate Surface Waters (20.6.4.11 NMAC) which included a requirement that:

> *[c]ompliance with water quality standards for the protection of human health shall be determined from the analytical results of representative grab samples, as defined in the Water Quality Management Plan.*. [Emphasis added.]

The proposal for Work Element 10 was developed after the WQCC directed the SWQB to do so at its July 2002 meeting. The SWQB reviewed the transcript of hearing for the human health water quality criteria proposal held in March 2002 to determine whom in that hearing had expressed interest or concern about this issue. Hearing participants on this point were the Los Alamos National Laboratory, the San Juan Water Commission and Mr. John Hernandez. Due to time constraints, the SWQB met with LANL representatives and created a draft that was promptly communicated to Mr. Hernandez and the SJWC for comment. SWQB received comments from LANL and Mr. Hernandez in time for the comments to be incorporated in the draft sent to the WQCC two weeks prior to their August meeting. SWQB also received written comments from the SJWC but not in time to be included in the draft sent WQCC.

The WQCC decided to: 1) provide another 30-day public comment period; and 2) schedule a formal public hearing on October 1, 2002 for the WQMP proposals (provided a written request for such a hearing was received during the 30-day period). A public notice was issued and published in New Mexico Register and the Albuquerque Journal. By letter dated August 15, 2002, the USEPA was formally notified by certified mail of the proposed revisions. Additional public comments and several requests for public hearing were received in response to the notice.

**Response to Comments Received August 13 through September 12, 2002**

(Note individual comments are briefly summarized below, full text of the comment may be viewed electronically).

Where similar comments from separate commenters occurred they have been compiled into a single general issue for response.

**General Issues**

There were several comments by the San Juan Water Commission and the Los Alamos National Laboratory regarding Work Element 10. Comments focused on sampling technique and frequency. The full text of the comment may be viewed electronically).

**Response to General Issue**

The SWQB's response will be offered as testimony at the October 1, 2002 hearing.

**Specific Issues**

**Concerned Citizens for Nuclear Safety Issues**

Concerned Citizens for Nuclear Safety resubmitted their comments of March 19, 2002. No new comments were received.

**C. Mechels Issues**

**C. Mechels Issue #1**

The proposed revisions should be rejected because the NMED has not met its obligation to involve the public. The NMED did not use suitable materials for briefings; the NMED did not meet commitments to meet with members of the public etc.

**Response to Mechels Issue # 1**

The SWQB believes it has met or exceeded all requirements to involve the public. There is no specific requirement in the New Mexico Water Quality Act regarding WQMP updates. The degree of involvement for updates to the WQMP is outlined in the WQCC's approved CPP. The CPP categorizes two types of updates: "administrative" and "updates that require formal notice and may require a public hearing." For "administrative updates, *"...placement of a proposed update on the agenda of a Water Quality Control Commission meeting constitutes adequate public notice ... these updates must be approved by the Water Quality Control Commission at an open meeting."* For updates that require formal public notice, the CPP provides:

- *... during development of a proposed update, NMED (alone or in conjunction with other entities) may provide information, solicit comments, or hold informal public meetings in the geographic area likely to be impacted or other appropriate area;*
- *... [w]here appropriate, a proposed update may be submitted to EPA in draft form for technical review before presentation to the Water Quality Control Commission;*
- *... there shall be at least thirty days allowed for the public to comment and to request a public hearing before the Commission acts on a proposed update; and*
- *... the Commission shall hold a formal public hearing if there are written requests for a hearing and the Commission determines there is significant public interest ... public notice shall be issued 45 days before the hearing.*

The SWQB sought and obtained comments from the USEPA prior to releasing its first public proposal to assure the proposal was viable before asking the WQCC and the public to spend valuable time in review.

The SWQB initially requested placement on the January 2002 WQCC regular monthly meeting. Unfortunately the WQCC did not hold a January meeting however the SWQB had already set into motion other public announcement and schedules for public meetings. The proposal was published on the proposed agenda for the WQCC's next regular meeting in March 2002. The

WQCC deferred the agenda item to April. The proposal appeared again on the April 2002 regular meeting agenda and was publicly heard by the WQCC on that date.

The initial public comment period was between January 18 and March 19; a period of 60-days that is twice the required 30-day period.

The SWQB held four advertised public meetings in Las Cruces, Roswell, Santa Fe, and Farmington. The meetings and their topic were advertised in the *Albuquerque Journal*, the *Santa Fe New Mexican*, the *Las Cruces Sun News*, the *Roswell Record,* and the *Farmington Daily Times*. News releases were also issued to the public and media by the NMED.

No request for public hearing was received during the January through March public comment period. The WQCC did receive oral requests at the April meeting. A public hearing was scheduled and announced by the WQCC on August 13, 2002 at their regular meeting during the publicly announced and scheduled agenda item regarding the WQMP update. The scheduled date for the hearing was October 1, 2002, 48 days subsequent to their announcement. The WQCC at the same August meeting opened another 30-day public comment period.

Throughout the process of updating the WQMP, the SWQB has upon invitation discussed the plan with interested parties such as WESTCAS, the Western Coalition of Arid States, and with interested individuals, including Mr. Mechels, who either visited our office or inquired by phone. The proposal and various public notices have been posted the NMED SWQB website since January 19, 2002. The SWQB responded positively to all requests to meet with any interested party on this topic.

The SWQB met and or consulted with identifiable stakeholders in the development of the new Work Element 10 as it promised it would after being directed by the WQCC to develop a solution to the definition of human health criteria compliance sampling at the April WQCC meeting. Please see the above discussion in this supplement regarding Work Element 10.

As noted in the SWQB's earlier response to general comments (General Issue #2), other public and stakeholder reviewers found the SWQB's effort and presentations useful.

**C. Mechels Issue #2**

The proposed plan does not meet an essential requirement, made clear in the April 9, 2001 letter from NMED to EPA *"The final Plan will be designed to provide easily accessible information to ... the public in an efficient and effective manner."* The plan fails to provide any adequate explanation, the introduction is inadequate and the plan is overly reliant on referencing documents.

**Response to C. Mechels Issue #2**

Responses to these concerns are similar to the SWQB's response to General Issues 1& 2 above. SWQB believes the approach of creating an electronically linked and referenced document has provided the public and document users unprecedented access to volumes of information that

would be otherwise difficult or time consuming to obtain. For example, the SWQB's approach in Work Element 1 not only presents the reader access to the TMDL document but also allows the reader to review supporting documentation or "the paper trail" such as WQCC minutes for the meeting where the document was approved as well as USEPA's approval letter.

**C. Mechels Issue #3**

The Plan is cast as a dialogue between NMED and EPA and relies upon "rote compliance" … the plan excludes the public …needs to be recast and rewritten … no other state resorts to rote compliance.

**Response to C. Mechels Issue # 3**

The plan does not rely on rote compliance, the public has been heavily involved, formal and informal comments received from the public (e.g., LANL Sept 12, 2002) comments and the EPA (Michael Haire, USEPA Headquarters Office of Wetlands, Oceans and Watersheds, (personal communication with James Davis of SWQB) have indicated the proposed approach could in fact become a national model for other states to follow. The SWQB's electronic reference document approach also received national attention from the *Association of State and Interstate Water Pollution Control Administrators* (ASIWPCA) in their March 2002 newsletter called "*STATEments.*" The ASIWPCA newsletter recognized New Mexico's use of Websites to post TMDL documents and noted:

> *Building on the lessons learned, NMED Surface Water Quality Bureau recently prepared a draft update to its Water Quality Management Plan (WQMP), which takes full advantage of information on its Web sites. Under the proposed approach, the WQMP becomes an index to a wide variety of water quality management program documents (complete with electronic links), thus making it more user friendly. Program document include the Continuing Planning Process (CPP) Standards for Interstate and Intrastate Surface Waters, Ground & Surface Water Protection Regulations, and the Nonpoint Source Management Plan. ...* ***This is the type of technical exchange and program sharing being promoted by ASIWPCA and by America's Clean Water Foundation (ACWF)***. [Emphasis added.]

As previously discussed the Bureau's effort has been to recompile and organize many existing documents to make them accessible through one document. All components of the proposed recompilation have at one time or another gone through its own public review and participation. For example, each of the 44 TMDL documents included in Work Element 1 has gone through a significant public participation process ranging from public demonstrations on water quality collection prior, and public watershed meetings prior to collecting data and writing the TMDL; publicly noticed requests for public comment on the draft documents through the WQCC; and open deliberation and adoption of the documents by the WQCC at publicly noticed open meetings.

**San Juan Water Commission (SJWC) Issues**

**San Juan Water Commission Issue #1**

SJWC reiterates its Feb. 26, 2002 comment and concern regarding Work Element 8 and the WQCC's prior determination to utilize a statewide planning approach rather than a basin approach. The SJWC suggests an additional "strategy" for the Work Element to indicate that the state encourages the development of regional and basin-wide planning initiatives by regional water quality management agencies.

**Response to San Juan Water Commission Issue #1**

SWQB responded to this concern under the first set of public comment response under General Issue #4. SWQB's recommendation remains that this issue should be addressed in it own separate forum. SWQB believes there are technical problems with SJWC's suggestion to have regional authorities to develop regional water quality plans. Currently the WQCC is statutorily the "water pollution control agency for this state for purposes of the federal Clean Water Act" [§74-6-3.E NMSA] and the WQCC is charged with the responsibility to "adopt a comprehensive water quality management program" [74-6-4.B. NMSA]. However, SJWC's suggestion has some good elements. SWQB recognizes the need to work with local organizations and entities on these important issues. Regional and local involvement in water quality issues is a valuable activity. A new strategy for Work Element 8 has been added.

**Los Alamos National Laboratory (LANL) Issues**

**Los Alamos National Laboratory Issue #1**

With regard to Work Element 1, LANL reiterated the same concern addressed in the first set of comments under LANL Issue #6 in the previous response to comments. LANL added to their comment that negotiated grant commitments should be listed in this document or a link to the list provided and that the criteria that would determine a necessary TMDL or appropriate TMDL should be listed or incorporated.

**Response to LANL Issue #1**

SWQB does not agree grant commitments are within the scope of this document. Grant commitments are often renegotiated to accommodate rapidly changing concerns. With regard to criteria for determining TMDL needs this is already addressed in the CPP's "Process for Establishing and Assuring Implementation of Water Quality Standards."

**Los Alamos National Laboratory Issue #2**

With regard to Work Element 2, LANL reiterated the same concern addressed in the first set of comments under LANL Issue #9 in the previous response to comments. LANL added to their comment that the strategic elements should be reworded to indicate the State's roles if any.

**Response to LANL Issue #2**

SWQB refers to its previous response to comment and notes that the State's current role is clearly identified in the "Background" portion of the Work Element. The strategies are currently carefully worded to address what strategy the "permitting authority" should follow whether it is EPA as in the current situation or the state in the possibility that the State becomes the delegated NPDES permitting authority.

**Los Alamos National Laboratory Issue #3**

With regard to Work Element 4 LANL reiterated the same concern addressed in the first set of comments under LANL Issue # 13.

**Response to LANL Issue #3**

LANL's comments are noted.

**Los Alamos National Laboratory Issue # 4**

With regard to Work Element 6 LANL reiterated the same concern addressed in their first set of comments under LANL Issue # 16. LANL added a new suggestion that the section could include such a schedule or reference to where a schedule exists.

**Response to LANL Issue # 4**
The Background Section of Work Element 6 originally proposed in the December 20, 2001 draft was rewritten to provide clarification and additional examples in response to LANL's first set of comments. SWQB believes the revised background section answers the concern. Inclusion of schedules directly in the plan is problematic since they are often dependent on outside factors and therefore subject to changes. For example, while the so-called triennial review of water quality standards seems like it should be initiated every three calendar years, the requirement is that the date the three years is counted from is the date the last review was submitted to EPA. The triennial review initiated by the SWQB in 1997 was not submitted to EPA until late 2000 due to independent factors including prolonged public participation and WQCC deliberation, thus the next timely review would need to be initiated in 2003. However, one of the values of scheduling is public notification. SWQB has added an additional strategy to post a tentative schedule on the Internet as a means of public information. Examples of items that could be included in the schedule include (but would not be limited to) the triennial water quality standard reviews, biennial updates to the 305(b) report to Congress and the biennial update of the 303(d) list. Posting on the Internet would allow public access to the information.